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Duke Energy CORP  
 Form 10-K  
 February 21, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 WASHINGTON, D.C. 20549  
 FORM 10-K  
 (Mark One)

✓ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
 For the fiscal period ended December 31, 2017 or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission Registrant, State of Incorporation or Organization, Address of Principal Executive Offices and Telephone Number  
 file number IRS Employer Identification No.

Commission file number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number and IRS Employer Identification Number	Commission file number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number and IRS Employer Identification Number
1-32853	DUKE ENERGY CORPORATION (a Delaware corporation) 550 South Tryon Street Charlotte, NC 28202-1803 704-382-3853		20-2777218
1-4928	DUKE ENERGY CAROLINAS, LLC (a North Carolina limited liability company) 526 South Church Street Charlotte, North Carolina 28202-1803 704-382-3853 56-0205520	1-3274	DUKE ENERGY FLORIDA, LLC (a Florida limited liability company) 299 First Avenue North St. Petersburg, Florida 33701 704-382-3853 59-0247770
1-15929	PROGRESS ENERGY, INC. (a North Carolina corporation) 410 South Wilmington Street Raleigh, North Carolina 27601-1748 704-382-3853 56-2155481	1-1232	DUKE ENERGY OHIO, INC. (an Ohio corporation) 139 East Fourth Street Cincinnati, Ohio 45202 704-382-3853 31-0240030
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	1-3543	DUKE ENERGY INDIANA, LLC (an Indiana limited liability company) 1000 East Main Street Plainfield, Indiana 46168 704-382-3853 35-0594457
1-6196	PIEDMONT NATURAL GAS COMPANY, INC. (a North Carolina corporation) 4720 Piedmont Row Drive		

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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, Inc.
Duke Energy	5.125% Junior Subordinated Debentures due January 15, 2073	New York Stock Exchange, Inc.

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes  No  (Response applicable to all registrants.)

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

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

Indicate by check mark 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging growth company

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

Indicate by check mark whether Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont are large accelerated filers, accelerated filers, non-accelerated filers, or smaller reporting companies. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging growth company

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

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Indicate by check mark whether the registrants are a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

Estimated aggregate market value of the common equity held by nonaffiliates of Duke Energy at June 30, 2017. \$58,468,482,557

Number of shares of Common Stock, \$0.001 par value, outstanding at January 31, 2018. 700,092,667

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Duke Energy definitive proxy statement for the 2018 Annual Meeting of the Shareholders or an amendment to this Annual Report are incorporated by reference into PART III, Items 10, 11 and 13 hereof.

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

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

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#### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This document includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are based on management's beliefs and assumptions and can often be identified by terms and phrases that include "anticipate," "believe," "intend," "estimate," "expect," "continue," "should," "could," "may," "plan," "project," "predict," "will," "potential," "forecast," "target" 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 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 and 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;

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- 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;
-

• 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 new 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;

• The ability to successfully complete future merger, acquisition or divestiture plans; and

• The ability to implement our business strategy.

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 [www.sec.gov](http://www.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.

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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
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
ADIT	Net Accumulated Deferred Income Tax
AFUDC	Allowance for funds used during construction
the Agents	Wells Fargo Securities, LLC, Citigroup Global Market Inc., J.P. Morgan Securities, LLC
ALJ	Administrative Law Judge
Amended Complaint	Amended Verified Consolidated Shareholder Derivative Complaint
AMI	Advanced Metering Infrastructure
ANPRM	Advance Notice of Proposed Rulemaking
AOCI	Accumulated Other Comprehensive Income (Loss)
ARO	Asset Retirement Obligation
the ASR	Accelerated Stock Repurchase Program
ASRP	Accelerated natural gas service line replacement program
Audit Committee	Audit Committee of the Board of Directors
Barclays	Barclays Capital Inc.
BCWF	Benton County Wind Farm, LLC
Beckjord	Beckjord Generating Station

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Belews Creek	Belews Creek Steam Station
Bison	Bison Insurance Company Limited
Board of Directors	Duke Energy Board of Directors
Bresalier Complaint	Shareholder derivative lawsuit filed by Saul Bresalier related to ash basin management practices
Bresalier Defendants	Several current and former Duke Energy officers and directors named in the Bresalier Complaint
Bridge Facility	\$4.9 billion senior secured financing facility with Barclays Capital Inc.
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)
CO <sub>2</sub>	Carbon Dioxide

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Coal Ash Act	North Carolina Coal Ash Management Act of 2014
COL	Combined Operating License
the Company	Duke Energy Corporation and its subsidiaries
Consolidated Complaint	Corrected Verified Consolidated Shareholder Derivative Complaint
Constitution	Constitution Pipeline Company, LLC
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CP	Capacity Performance
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 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
the Dealers	Goldman, Sachs & Co. and JPMorgan Chase Bank
DEFPPF	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

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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
Dth	Dekatherm
Duke Energy	Duke Energy Corporation (collectively with its subsidiaries)
Duke Energy Carolinas	Duke Energy Carolinas, LLC
Duke Energy Defendants	Several current and former Duke Energy officers and directors named as defendants in the Consolidated Complaint
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

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Duke Energy Registrants	Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont
Dynegy	Dynegy Inc.
East Bend	East Bend Generating Station
the EDA	Equity Distribution Agreement
EE	Energy efficiency
EGU	Electric Generating Units
EIS	Environmental Impact Statement
ELG	Effluent Limitations Guidelines
EPA	U.S. Environmental Protection Agency
EPC	Engineering, Procurement and Construction agreement
EPS	Earnings Per Share
ESP	Electric Security Plan
ETR	Effective tax rate
Exchange Act	Exchange Act of 1934
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
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
FRR	Fixed Resource Requirement
FTR	Financial transmission rights

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GAAP	Generally Accepted Accounting Principles in the United States
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 Holding Ltd.
IBNR	Incurred but not yet reported
ICPA	Inter-Company Power Agreement
IGCC	Integrated Gasification Combined Cycle
IGCC Rider	Tracking mechanism used to recover costs related to the Edwardsport IGCC plant from retail electric customers
IGCC Settlement	2015 Settlement to resolve disputes with intervenors related to five IGCC riders
IMR	Integrity Management Rider
International Disposal Group	Duke Energy's international business, excluding National Methanol Company
IRP	Integrated Resource Plans
IRS	Internal Revenue Service

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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
kWh	Kilowatt-hour
LDC	Local Distribution Company
Lee Nuclear Station	William States Lee III Nuclear Station
Legacy Duke Energy Directors	Members of the pre-merger Duke Energy Board of Directors
Levy	Duke Energy Florida's proposed nuclear plant in Levy County, Florida
LIBOR	London Interbank Offered Rate
Long-Term FERC Mitigation	The revised market power mitigation plan related to the Progress Energy merger
Master Trust	Duke Energy Master Retirement Trust
McGuire	McGuire Nuclear Station
Merger Agreement	The Agreement and Plan of Merger between Duke Energy and Piedmont
Merger Chancery Litigation	Four shareholder derivative lawsuits filed in the Delaware Chancery Court related to the Progress Energy merger
MGP	Manufactured gas plant
Midwest Generation Disposal Group	Duke Energy Ohio's nonregulated Midwest generation business and Duke Energy Retail Sales, LLC

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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
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
NCRC	Florida's Nuclear Cost Recovery Clause
NCRS	Nuclear Power Plant Cost Recovery Statutes
NCUC	North Carolina Utilities Commission
NDTF	Nuclear decommissioning trust funds
NEIL	Nuclear Electric Insurance Limited

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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 <sub>x</sub>	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPNS	Normal purchase/normal sale
NPR	Notice of Proposed Rulemaking
NRC	U.S. Nuclear Regulatory Commission
NWPA	Nuclear Waste Policy Act of 1982
NYSE	New York Stock Exchange
Oconee	Oconee Nuclear Station
OPEB	Other Post-Retirement Benefit Obligations
ORS	Office of Regulatory Staff
Osprey Plant 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
Phase I CCR Compliance Projects	Duke Energy Indiana's federally mandated compliance projects to comply with the EPA's CCR rule

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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	18-month term loan facility with commitments totaling \$250M 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

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RCA	Revolving Credit Agreement
RCRA	Resource Conservation and Recovery Act
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
Sabal Trail	Sabal Trail Transmission, LLC
Sabal Trail Pipeline	Sabal Trail Natural Gas Pipeline
SACE	Southern Alliance of Clean Energy
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
S.C. Court of Appeals	Court of Appeals of South Carolina
SCCL	South Carolina Coastal Conservation League
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
SO <sub>2</sub>	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

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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 Cut and Jobs Act
T&D Rider	Tracking mechanism to recover grid infrastructure improvement costs in Indiana
TPUC	Tennessee Public Utility Commission
TSR	Total shareholder return
Uprate Project	Hines Chiller Uprate Project
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
WNA	weather normalization adjustment
WVPA	Wabash Valley Power Association, Inc.

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## PART I

### ITEM 1. BUSINESS

#### DUKE ENERGY

##### General

Duke Energy Corporation (collectively with its subsidiaries, Duke Energy) was incorporated on May 3, 2005, and is an energy company headquartered in Charlotte, North Carolina, subject to regulation by the Federal Energy Regulatory Commission (FERC). Duke Energy operates in the United States (U.S.) primarily through its direct and indirect subsidiaries. Certain Duke Energy subsidiaries are also subsidiary registrants, including 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). When discussing Duke Energy's consolidated financial information, it necessarily includes the results of its separate subsidiary registrants (collectively referred to as the 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 National Methanol Company (NMC), was completed through two transactions including a sale of assets in Brazil to China Three Gorges (Luxembourg) Energy S.à.r.l. (CTG) and a sale of Duke Energy's remaining Latin American assets in Peru, Chile, Ecuador, Guatemala, El Salvador and Argentina to ISQ Enerlam Aggregator, L.P. and Enerlam (UK) Holding Ltd. (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 Securities and Exchange Commission (SEC), including Annual Reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxies and amendments to such reports.

The public may read and copy any materials the Duke Energy Registrants file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at <http://www.sec.gov>. Additionally, information about the Duke Energy Registrants, including reports filed with the SEC, is available through Duke Energy's website at <http://www.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 operating segments (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 7.6 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 Duke-American Transmission Co. (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.

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The electric operations and investments in projects are subject to the rules and regulations of the FERC, the North Carolina Utilities Commission (NCUC), the Public Service Commission of South Carolina (PSCSC), the Florida Public Service Commission (FPSC), the Indiana Utility Regulatory Commission (IURC), the Public Utilities Commission of Ohio (PUCO) and the Kentucky Public Service Commission (KPSC).

The following table represents the distribution of billed sales by customer class for the year ended December 31, 2017.

	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	
Residential	30	% 26	% 49	% 34	% 26	%
General service	33	% 23	% 37	% 38	% 25	%
Industrial	25	% 16	% 8	% 23	% 32	%
Total retail sales	88	% 65	% 94	% 95	% 83	%
Wholesale and other sales	12	% 35	% 6	% 5	% 17	%
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 continue to improve, sales growth has been hampered by continued adoption of energy efficiencies and self-generation. The continued adoption of more efficient housing and appliances is expected to have a negative impact on average usage per residential customer over time. While residential sales increased in 2017 compared to 2016, the growth rate was modest when compared to historical periods.

#### Seasonality and the Impact of Weather

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

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

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

#### Competition

##### Retail

Electric Utilities and Infrastructure's businesses operate as the sole supplier of electricity within their service territories, with the exception of Ohio, which has a competitive electricity supply market for generation service. Electric Utilities and Infrastructure owns and operates facilities necessary to transmit and distribute electricity and, except in Ohio, to 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.

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.

Duke Energy is not aware of any proposed legislation within any of its jurisdictions that would provide retail customers the right to choose their electricity provider or otherwise restructure or deregulate the electric industry, including broadly subsidizing distributed generation such as private solar.

Although there is no pending legislation at this time, if the retail jurisdictions served by Electric Utilities and Infrastructure become subject to deregulation, the recovery of stranded costs could become a significant consideration. Stranded costs primarily include the generation assets of Electric Utilities and Infrastructure whose value in a competitive marketplace may be less than their current book value, as well as above-market purchased power commitments from qualifying facilities (QFs). The Public Utility Regulatory Policies Act of 1978 (PURPA) established a new class of generating facilities as QFs, typically small power production facilities that generate power within a utility company's service territory for which the utility companies are legally obligated to purchase the energy at an avoided cost rate. Thus far, all states that have passed restructuring legislation have provided for the opportunity to recover a substantial portion of stranded costs.



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Electric Utilities and Infrastructure's largest stranded cost exposure is primarily related to Duke Energy Florida's purchased power commitments with QFs, under which it has future minimum expected capacity payments through 2043 of \$2.4 billion. Duke Energy Florida was obligated to enter into these contracts under provisions of PURPA. Duke Energy Florida continues to seek ways to address the impact of escalating payments under these contracts. However, the FPSC allows full recovery of the retail portion of the cost of power purchased from QFs. For additional information related to these purchased power commitments, see Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies."

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 and not on the cost of the underlying energy.

### 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 price, availability of capacity and power and reliability of service. 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 49,506 megawatts (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.

### Potential Plant Retirements

The Subsidiary Registrants periodically file Integrated Resource Plans (IRP) with state regulatory commissions. The IRPs provide a view of forecasted energy needs over a long term (10 to 20 years) and options being considered to meet those needs. Recent IRPs filed by the Subsidiary Registrants included planning assumptions to potentially retire certain coal-fired generating facilities earlier than their current estimated useful lives, primarily because these facilities do not have the requisite emission control equipment to meet United States Environmental Protection Agency (EPA) regulations recently approved or proposed. Duke Energy continues to evaluate the potential need to retire these coal-fired generating facilities earlier than the current estimated useful lives and plans to seek regulatory recovery for amounts that would not be otherwise recovered when any of these assets are retired. For additional information related to potential plant retirements, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

On October 23, 2015, the EPA published in the Federal Register the final Clean Power Plan (CPP) rule that regulates carbon dioxide (CO<sub>2</sub>) emissions from existing fossil fuel-fired electric generating units (EGUs). The CPP establishes CO<sub>2</sub> emission rates and mass cap goals that apply to existing fossil fuel-fired EGUs. Petitions challenging the rule were filed by several groups and on February 9, 2016, the Supreme Court issued a stay of the final CPP rule, halting

implementation of the CPP until legal challenges are resolved. States in which the Duke Energy Registrants operate have suspended work on the CPP in response to the stay. Oral arguments before 10 of the 11 judges on D.C. Circuit Court were heard on September 27, 2016. The court has not issued its opinion in the case.

On March 28, 2017, President Trump signed an executive order directing EPA to review the CPP and determine whether to suspend, revise or rescind the rule. On the same day, the Department of Justice (DOJ) filed a motion with the D.C. Circuit Court requesting that the court stay the litigation of the rule while it is reviewed by EPA. On April 28, 2017, the court issued an order to suspend the litigation for 60 days. On August 8, 2017, the court, on its own motion, extended the suspension of the litigation for an additional 60 days. On October 16, 2017, EPA issued a Notice of Proposed Rulemaking (NPR) to repeal the CPP based on a change to EPA's legal interpretation of the section of the Clean Air Act (CAA) on which the CPP was based. In the proposal, EPA indicates that it has not determined whether it will issue a rule to replace the CPP, and if it will do so, when and what form that rule will take. The comment period on EPA's NPR ends April 26, 2018. On December 28, 2017 EPA issued an Advance Notice of Proposed Rulemaking (ANPRM) in which it seeks public comment on various aspects of a potential CPP replacement rule. The comment period on the ANPRM ends February 26, 2018. If EPA decides to move forward with a CPP replacement rule, it will need to issue a formal proposal for public comment. Litigation of the CPP remains on hold in the D.C. Circuit and the February 2016 U.S. Supreme Court stay of the CPP remains in effect.

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Should the CPP be upheld, compliance could cause the industry to replace coal-fired generation with natural gas and renewables. Costs to operate coal-fired generation plants continue to grow due to increasing environmental compliance requirements, including ash management costs unrelated to CPP, which may result in the retirement of coal-fired generation plants earlier than the current end of useful lives. The Duke Energy Registrants could incur increased fuel, purchased power, operation and maintenance and other costs for replacement generation as a result of this rule. Due to the uncertainties related to the implementation of the CPP, the Duke Energy Registrants cannot predict the outcome of these matters.

## 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, 2017.

	Generation by Source			Cost of Delivered Fuel per Net Kilowatt-hour Generated (Cents)		
	2017	2016	2015	2017	2016	2015
Coal <sup>(a)</sup>	27.4 %	27.1 %	29.0 %	2.72	3.07	3.24
Nuclear <sup>(a)</sup>	27.8 %	27.4 %	27.0 %	0.69	0.66	0.65
Natural gas and oil <sup>(a)</sup>	23.6 %	22.9 %	23.1 %	2.85	3.07	3.74
All fuels (cost-based on weighted average) <sup>(a)</sup>	78.8 %	77.4 %	79.1 %	2.04	2.22	2.50
Hydroelectric and solar <sup>(b)</sup>	0.7 %	0.7 %	0.8 %			
Total generation	79.5 %	78.1 %	79.9 %			
Purchased power and net interchange	20.5 %	21.9 %	20.1 %			
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 re-openers, range from 2018 to 2020 for Duke Energy Carolinas, 2018 to 2020 for Duke Energy Progress, 2018 to 2020 for Duke Energy Florida, 2018 to 2020 for Duke Energy Ohio and 2018 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 delivered by barge and 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, between 1.5 percent and 2 percent for 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 sulfur dioxide (SO<sub>2</sub>) emission allowances, enable Electric Utilities and Infrastructure to satisfy current SO<sub>2</sub> 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 2018 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.

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## Natural Gas and Fuel Oil

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

Electric Utilities and Infrastructure has certain dual-fuel generating facilities that can operate utilizing both natural gas and fuel oil. The cost of Electric Utilities and Infrastructure's natural gas and fuel oil is fixed price or determined by published market prices as reported in certain industry publications, plus any transportation and freight costs. Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana use derivative instruments to manage a portion of their exposure to price fluctuations for natural gas. For Duke Energy Florida, there is currently an agreed to moratorium on future hedging with the Florida Public Service Commission.

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:

	2017	2016	2015
Purchase obligations and leases (in millions of megawatt-hours (MWh))(a)	17.7	18.0	14.9
Purchase capacity under contract (in MW)(b)	4,028	4,588	4,573

(a) Represents approximately 7 percent of total system requirements for 2017 and 2016 and 6 percent for 2015.

(b) These agreements include approximately 451 MW of firm capacity under contract by Duke Energy Florida with QFs.

## Inventory

Generation of electricity is capital intensive. 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, 2017, the inventory balance for Electric Utilities and Infrastructure was approximately \$3.1 billion. For additional information on inventory, see Note 1 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies."

## Ash Basin Management

The North Carolina Coal Ash Management Act of 2014 (Coal Ash Act) regulates the handling of coal ash within the state and requires closure of ash impoundments by no later than December 31, 2029, based on risk rankings, among other detailed requirements. The Coal Ash Act leaves the decision on cost recovery determinations related to closure of coal ash surface impoundments (ash basins or impoundments) to the normal ratemaking processes before utility regulatory commissions. Duke Energy 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.

On April 17, 2015, the EPA published in the Federal Register a rule to regulate the disposal of coal combustion residuals (CCR) from electric utilities as solid waste. The rule classifies CCR as nonhazardous under Subtitle D of the Resource Conservation and Recovery Act (RCRA). The EPA CCR rule has certain requirements, which if not met could initiate impoundment closure and require closure completion within five years. The EPA CCR rule includes

extension requirements, which if met could allow the extension of closure completion by up to 10 years. The RCRA and the Coal Ash Act finalized the legal framework related to coal ash management practices and ash basin closure. Duke Energy has advanced the strategy and implementation for the remediation or closure of coal ash basins. In 2015, Duke Energy began activities at certain North Carolina sites specified as high priority by the Coal Ash Act, including moving coal ash off-site for use in structural fill or to lined landfills. Additional modifications to operating coal plants are underway to comply with the Coal Ash Act and RCRA.

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 Notes 4, 5 and 9 to the Consolidated Financial Statements, "Regulatory Matters," "Commitments and Contingencies" and "Asset Retirement Obligations," respectively.

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## Nuclear Matters

Duke Energy owns, wholly or partially, 11 operating nuclear reactors located at six stations. The Crystal River Unit 3 Nuclear Plant (Crystal River Unit 3) permanently ceased operation in February 2013. Nuclear insurance includes: nuclear liability coverage; property damage coverage; nuclear accident decontamination and premature decommissioning coverage; and accidental outage coverage for losses in the event of a major accidental outage. Joint owners reimburse Duke Energy for certain expenses associated with nuclear insurance in accordance with joint owner agreements. The Price-Anderson Act requires plant owners to provide for public nuclear liability claims resulting from nuclear incidents to the maximum total financial protection liability, which is approximately \$13.4 billion. For additional information on nuclear insurance see Note 5 to the Consolidated Financial Statements, "Commitments and Contingencies."

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

The following table summarizes the fair value of nuclear decommissioning trust fund (NDTF) balances and cost study results for Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida. Decommissioning costs in the table below are stated in 2013 or 2014 dollars, depending on the year of the cost study, and include costs to decommission plant components not subject to radioactive contamination.

(in millions)	NDTF <sup>(a)</sup>		Decommissioning	
	December 31, 2017	December 31, 2016	Costs <sup>(a)(b)</sup>	Year of Cost Study
Duke Energy	\$7,097	\$ 6,205	\$ 8,150	2013 and 2014
Duke Energy Carolinas	3,772	3,273	3,420	2013
Duke Energy Progress	2,588	2,217	3,550	2014
Duke Energy Florida <sup>(c)</sup>	736	715	1,180	2013

(a) Amounts for Progress Energy equal the sum of Duke Energy Progress and Duke Energy Florida.

(b) Amounts include the Subsidiary Registrants' ownership interest in jointly owned reactors. Other joint owners are responsible for decommissioning costs related to their interest in the reactors.

(c) 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 Nuclear Waste Policy Act of 1982 (as amended) (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 U.S. Department of Energy (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, Shearon Harris Nuclear Plant (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 independent spent fuel storage installation where it will be stored until the DOE removes it. With certain modifications and approvals by the U.S. Nuclear Regulatory Commission (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 the Brunswick Nuclear Plant (Brunswick), Catawba Nuclear Station (Catawba), McGuire Nuclear Station (McGuire), Oconee Nuclear Station (Oconee) and Robinson Nuclear Plant (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.



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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 decommissioning activity, see Note 4 to the Consolidated Financial Statements, "Regulatory Matters."

On October 27, 2016, and December 15, 2016, the NRC issued combined operating licenses for Duke Energy Florida's proposed Levy Nuclear Plant Units 1 and 2 (Levy) and Duke Energy Carolinas' William States Lee III Nuclear Station Units 1 and 2, respectively. 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. On August 29, 2017, Duke Energy announced the complete abandonment of the Levy project with the intent to terminate the combined operating licenses. For additional information on these proposed nuclear plants, 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. Certificates of Public Convenience and Necessity 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.



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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 (in millions)	Return on Equity	Equity Component of Capital Structure	Effective Date
Approved Rate Cases:					
Duke Energy Progress 2016 South Carolina Rate Case <sup>(a)</sup>	PSCSC	(a)	10.1	% 53	% 1/1/2017
Pending Rate Cases:					
Duke Energy Carolinas 2017 North Carolina Rate Case	NCUC	\$ 647	10.75	% 53	% 5/1/2018 <sup>(d)</sup>
Duke Energy Progress 2017 North Carolina Rate Case <sup>(b)</sup>	NCUC	85	9.9	% 52	% 2/1/2018 <sup>(d)</sup>
Duke Energy Progress 2017 North Carolina Rate Case <sup>(c)</sup>	NCUC	221	9.9	% 52	% 2/1/2018 <sup>(d)</sup>
Duke Energy Kentucky 2017 Kentucky Rate Case	KPSC	49	10.3	% 49	% 4/15/2018 <sup>(d)</sup>
Duke Energy Ohio 2017 Ohio Rate Case	PUCO	15	10.4	% 50.75	% 1/1/2018 <sup>(d)</sup>

An increase of approximately \$38 million in revenues was effective January 1, 2017, and an additional increase of (a) approximately \$18.5 million in revenues was effective January 1, 2018. Duke Energy Progress amortized approximately \$18.5 million from the cost of removal reserve in 2017.

(b) On November 22, 2017, Duke Energy Progress and the North Carolina Public Staff filed an Agreement and Stipulation of Partial Settlement resolving certain portions of the proceeding, pending NCUC approval.

(c) Represents portions in the original 2017 rate case application not covered by the Agreement and Stipulation of Partial Settlement.

(d) Represents the requested effective dates in the filings. Actual effective dates may differ based on orders from the respective commission.

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 Interconnection, LLC (PJM) and Midcontinent Independent System Operator, Inc. (MISO) are the Independent System Operators (ISO) 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 "Other Matters" section of MD&A for a discussion about potential Global Climate Change legislation and other EPA regulations under development and the potential impacts such legislation and regulation could have on Duke Energy's operations.

## GAS UTILITIES AND INFRASTRUCTURE

Gas Utilities and Infrastructure conducts natural gas operations primarily through the regulated public utilities of Piedmont and Duke Energy Ohio. The natural gas operations are subject to the rules and regulations of the NCUC, PSCSC, PUCO, KPSC, Tennessee Public Utility Commission (TPUC), Pipeline and Hazardous Materials Safety Administration (PHMSA) and the FERC. Gas Utilities and Infrastructure serves residential, commercial, industrial and power generation natural gas customers. Gas Utilities and Infrastructure has over 1.5 million customers, including more than 1 million customers located in North Carolina, South Carolina and Tennessee, and an additional 526,000 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 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 2017 when compared to 2016, 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.

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### 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 2017, firm supply purchase commitment agreements provided 100 percent of the natural gas supply for Piedmont and 100 percent for Duke Energy Ohio.

### Seasonality and the Impact of Weather

Gas Utilities and Infrastructure's costs and revenues are influenced by seasonal patterns due to peak natural gas sales occurring during the winter months. Residential customers are the most impacted by weather. There are certain regulatory mechanisms for the North Carolina, South Carolina and Tennessee service territories that normalize the margins collected from certain customer classes during the winter, providing for an adjustment either up or down. In North Carolina, rate design provides protection from both weather and other usage variations such as conservation. In South Carolina and Tennessee, revenues are adjusted solely based on weather during the periods of November through March and October through April, respectively. Rate design for the Ohio service territory also mitigates the impacts of weather on customer bills. 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.

Degree-day data are used to estimate energy required to maintain comfortable indoor temperatures based on each day's average temperature. Heating-degree days measure the variation in weather based on the extent the average daily temperature falls below a base temperature. The methodology used to estimate the applicable impact of weather does not consider all variables that may impact customer response to weather conditions, such as wind chill. The precision of this estimate may also be impacted by applying long-term weather trends to shorter-term periods.

### Competition

Gas Utilities and Infrastructure's businesses operate as the sole supplier of natural gas within their retail service territories, with the exception of Ohio, which has a competitive natural gas supply market for distribution service. 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 Atlantic Coast Pipeline, LLC (ACP) that plans to build and own the proposed Atlantic Coast Pipeline (ACP Pipeline), an approximately 600-mile interstate natural gas pipeline, regulated by FERC. Prior to the Piedmont acquisition, Duke Energy owned a 40 percent equity ownership in ACP. 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. The targeted in-service date of the pipeline is late 2019.

Gas Utilities and Infrastructure also has a 7.5 percent equity ownership interest in Sabal Trail Transmission, LLC (Sabal Trail). Sabal Trail is a joint venture that owns a 515-mile natural gas pipeline (Sabal Trail pipeline) to transport natural gas to Florida, regulated by FERC. The Sabal Trail phase one mainline was placed into service in July 2017 and traverses Alabama, Georgia and Florida. A request to place in-service a lateral line to the Duke Energy Florida's Citrus County Combined Cycle facility is pending with FERC. Current legal challenges to the Sabal Trail pipeline are ongoing, which may have an impact on continuing operations of the pipeline.

Gas Utilities and Infrastructure has a 24 percent equity ownership interest in Constitution Pipeline Company, LLC (Constitution), an interstate pipeline development company formed to develop, construct, own and operate a 124-mile natural gas pipeline and related facilities connecting shale natural gas supplies and gathering systems in Susquehanna County, Pennsylvania, to Iroquois Gas Transmission and Tennessee Gas Pipeline systems in New York, regulated by FERC. As a result of permitting delays and project uncertainty, Constitution is unable to approximate an in-service date.

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As a result of the Piedmont acquisition, Duke Energy, through its Gas Utilities and Infrastructure segment, has a 21.49 percent equity ownership interest in Cardinal Pipeline Company, LLC (Cardinal), an intrastate pipeline located in North Carolina regulated by the NCUC, a 45 percent equity ownership in Pine Needle LNG Company, LLC (Pine Needle), an interstate liquefied natural gas storage facility located in North Carolina and a 50 percent equity ownership interest in Hardy Storage Company, LLC (Hardy Storage), an underground interstate natural gas storage facility located in Hardy and Hampshire counties in West Virginia. Pine Needle and Hardy Storage are regulated by FERC.

KO Transmission Company (KO Transmission), a wholly owned subsidiary of Duke Energy Ohio, is an interstate pipeline company engaged in the business of transporting natural gas and is subject to the rules and regulations of FERC. KO Transmission's 90-mile pipeline supplies natural gas to Duke Energy Ohio and interconnects with the Columbia Gulf Transmission pipeline and Tennessee Gas Pipeline. An approximately 70-mile portion of KO Transmission's pipeline facilities is co-owned by Columbia Gas Transmission 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.

## Inventory

Gas Utilities and Infrastructure must maintain adequate natural gas inventory in order to provide reliable delivery to customers. As of December 31, 2017, the inventory balance for Gas Utilities and Infrastructure was \$106 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. Certificates of Public Convenience and Necessity 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 (in millions)	Return on Equity	Equity Component of Capital Structure	Effective Date
Piedmont 2016 South Carolina Rate Stabilization Adjustment Filing <sup>(a)</sup>	8	10.2 %	53.0	November 2016

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Piedmont 2017 South Carolina Rate Stabilization Adjustment Filing<sup>(a)</sup> 6 10.2 % 53.0 % November 2017

(a) Under the rate stabilization adjustment mechanism, Piedmont resets rates in South Carolina based on updated costs and revenues on an annual basis.

Gas Utilities and Infrastructure has integrity management rider (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 2017 IMR Filing – North Carolina <sup>(a)</sup>	\$ 738	\$ 77	December 2017
Piedmont 2016 IMR Filing – Tennessee <sup>(b)</sup>	193	23	January 2017
Pending Filing:			Proposed Effective Date
Piedmont 2017 IMR Filing – Tennessee <sup>(c)</sup>	\$ 231	\$ 23.4	January 2018



## PART I

- (a) Cumulative investment amounts through September 30, 2017.
- (b) Cumulative investment amounts through October 31, 2016.
- (c) Cumulative investment amounts through October 31, 2017. A ruling from the TPUC is pending.

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

### Federal

Gas Utilities and Infrastructure is subject to various federal regulations, including regulations that are particular to the natural gas industry. These federal regulations include but are not limited to the following:

Regulations of the FERC affect the certification and siting of new interstate natural gas pipeline projects, the purchase and sale of, the prices paid for, and the terms and conditions of service for the interstate transportation and storage of natural gas.

Regulations of the PHMSA affect the design, construction, operation, maintenance, integrity, safety and security of natural gas distribution and transmission systems.

Regulations of the EPA relate to the environment including proposed air emissions regulations that would expand to include emissions of methane. For a discussion of environmental regulation, see "Environmental Matters" in this section. Refer to "Other Matters" section of Management's Discussion and Analysis of Financial Condition and Results of Operations 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.

### COMMERCIAL RENEWABLES

Commercial Renewables primarily acquires, builds, develops and operates 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, which total 2,907 MW across 14 states from 21 wind facilities and 63 solar facilities. 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. In addition, as eligible wind and solar projects are placed in service, Commercial Renewables recognizes either investment tax credits (ITCs) when the renewable solar or wind project achieves commercial availability or production tax credits (PTC) as power is generated by wind projects over 10 years. Renewable 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 recognized in income in the year of commercial availability.

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 the 2015 acquisition of a controlling interest in 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. In 2017, Duke Energy acquired the remaining interest in REC Solar.

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

### 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.

### Market Environment and Competition

The market price of commodities and services, along with the quality and reliability of services provided, drive competition in the wholesale energy business. Commercial Renewables' main competitors include other nonregulated generators and wholesale power providers.

Sources of Electricity

Commercial Renewables relies on wind and solar resources for its generation of electric energy.

OTHER

The remainder of Duke Energy's operations is presented as Other. While it is not an operating 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 Insurance Company Limited (Bison) and an investment in NMC.

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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.

NMC is a joint venture that operates in Jubail, Saudi Arabia, as a large regional producer of methanol and methyl tertiary butyl ether (MTBE), an additive to gasoline. In 2017, NMC produced approximately 934,000 metric tons of methanol and approximately 1,087,000 metric tons of MTBE. Approximately 40 percent of methanol is normally used in MTBE production. Upon the successful startup of NMC's polyacetal production facility during the fourth quarter of 2017, Duke Energy's ownership interest in NMC decreased from 25 percent to 17.5 percent. 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.

## Regulation

Certain entities within Other are subject to the jurisdiction of federal, state and local agencies.

## Employees

On December 31, 2017, Duke Energy had a total of 29,060 employees on its payroll. The total includes 5,483 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.

## 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 <sup>(a)</sup>	Current and Recent Positions Held
Lynn J. Good	58	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	59	Executive Vice President and Chief Financial Officer. Mr. Young assumed his current position in August 2013. Prior to that, he had served as Senior Vice President, Chief Accounting Officer and Controller since April 2006.
Douglas F. Esamann	60	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 was President, Duke Energy Indiana since November 2010.
Lloyd M. Yates	57	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 December 2012 to August 2014, and prior to that, had served as Executive Vice President, Customer Operations since July 2012, upon the merger of Duke Energy and Progress Energy. Prior to the merger, Mr. Yates was President and Chief Executive Officer of Progress Energy Carolinas, Inc., which is now known as Duke Energy Progress, LLC since July 2007.
Dhiaa M. Jamil	61	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 had held the title Executive Vice President and President, Regulated Generation and Transmission since June 2015. Prior to that, he had 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 Chief Nuclear Officer from February 2008 to February 2013. He also served as Chief Generation Officer for Duke Energy from July 2009 to June 2012.

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Franklin H. Yoho	58	Executive Vice President and President, Natural Gas. 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. Prior to that, he served as Senior Vice President, Commercial Operations since March 2002.
Julia S. Janson	53	Executive Vice President, External Affairs, Chief Legal Officer and Corporate Secretary. Ms. Janson assumed her current position in December 2012 and, in May 2017, assumed the responsibilities for the External Affairs and Strategic Policy organization. Prior to that, she had held the position of President of Duke Energy Ohio and Duke Energy Kentucky since 2008.
Melissa H. Anderson	53	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.
William E. Currens Jr.	48	Senior Vice President, Chief Accounting Officer and Controller. Mr. Currens assumed his current position in May 2016. Prior to that, he had held the position of Vice President, Investor Relations since 2009.

(a) The ages of the officers provided are as of December 31, 2017.

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.

## PART I

### Environmental Matters

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

The Clean Air Act (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 Clean Water Act (CWA), which requires permits for facilities that discharge wastewaters into navigable waters. The Comprehensive Environmental Response, Compensation and Liability Act, which can require any individual or entity that currently owns or in the past owned or operated a disposal site, as well as transporters or generators of hazardous substances sent to a disposal site, to share in remediation costs.

The National Environmental Policy Act, which requires federal agencies to consider potential environmental impacts in their permitting and licensing decisions, including siting approvals.

Coal Ash Act, as amended, which establishes requirements regarding the use and closure of existing ash basins, the disposal of ash at active coal plants and the handling of surface water and groundwater impacts from ash basins in North Carolina.

The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), which creates a framework for the proper management of hazardous and nonhazardous solid waste; classifies CCR as nonhazardous waste; and establishes standards for landfill and surface impoundment placement, design, operation and closure, groundwater monitoring, corrective action, and post-closure care.

The Toxic Substances Control Act (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.

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 MD&A. 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 MD&A 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 greenhouse gas (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 2.5 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 1.5 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.

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

### DUKE ENERGY FLORIDA

Duke Energy Florida is a regulated public utility primarily engaged in the generation, transmission, distribution and sale of electricity in portions of Florida. Duke Energy Florida's service area covers approximately 13,000 square miles and supplies electric service to approximately 1.8 million residential, commercial and industrial customers. For information about Duke Energy Florida's generating facilities, see Item 2, "Properties." Duke Energy Florida is subject to the regulatory provisions of the FPSC, NRC and FERC.

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

### DUKE ENERGY OHIO

Duke Energy Ohio is a regulated public utility primarily engaged in the transmission and distribution of electricity in portions of Ohio and Kentucky, in the generation and sale of electricity in portions of Kentucky and the transportation and sale of natural gas in portions of Ohio and Kentucky. Duke Energy Ohio also conducts competitive auctions for retail electricity supply in Ohio whereby recovery of the energy price is from retail customers. Operations in Kentucky are conducted through its wholly owned subsidiary, Duke Energy Kentucky, Inc. (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 and FERC.

Duke Energy Ohio's service area covers approximately 3,000 square miles and supplies electric service to approximately 850,000 residential, commercial and industrial customers and provides transmission and distribution services for natural gas to approximately 529,000 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.

On April 2, 2015, Duke Energy completed the sale of its nonregulated Midwest generation business, which sold power into wholesale energy markets, to a subsidiary of Dynegy. For further information about the sale of the Midwest Generation business, refer to Note 2 to the Consolidated Financial Statements, "Acquisitions and Dispositions."

Substantially all of Duke Energy Ohio's operations that remain after the sale qualify for regulatory accounting.  
Business Segments

Duke Energy Ohio has two reportable operating 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 820,000 residential, commercial and industrial customers. See Item 2, "Properties" for further discussion of Duke Energy Indiana's generating facilities, transmission and distribution. 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. Piedmont is subject to the regulatory provisions of the NCUC, PSCSC, TPUC 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."



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### 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 future 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 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.

#### 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' future earnings. Additionally, if regulatory bodies do not allow recovery of costs incurred in providing service on a timely basis, the Duke Energy Registrants' future 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 future 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, rate stabilization in South Carolina and uncollectible natural gas cost recovery in all states. 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 liquidity 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 could have a material adverse effect on the Duke Energy Registrants' results of operations, financial position or liquidity and affect the ability of the Duke Energy Registrants to recover costs and an appropriate return on the significant infrastructure investments being made. Duke Energy cannot predict the outcome of these rate case proceedings.

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. Retail competition and the unbundling of regulated electric service could have a significant adverse financial impact on the Duke Energy Registrants due to an impairment of assets, a loss of retail customers, lower profit margins or increased costs of capital. 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 financial position, results of operations or cash flows.

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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.

Duke Energy is subject to regulations under a wide variety of U.S. federal and state regulations and policies. 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 or prohibiting them outright.

On December 22, 2017, President Trump signed the Tax Cuts and Jobs Acts (the Tax Act) into law which, among other provisions, reduces the maximum federal corporate income tax rate from 35 percent to 21 percent and limits interest deductions outside of regulated utility operations effective January 1, 2018. The resulting revaluation of existing deferred tax assets and liabilities to the lower federal corporate tax rate were recognized in Duke Energy's December 31, 2017, financial statements. Guidance issued by the SEC indicates that additional adjustments for items that were estimated may be recorded during 2018 if new information becomes available. The Tax Act also could be amended or subject to technical correction, which could change the financial impacts that were recorded at December 31, 2017, or are expected to be recorded in future periods. The FERC and state utility commissions will determine the regulatory treatment of the impacts of the Tax Act. Duke Energy's future results of operations, financial condition and cash flows could be adversely impacted by the Tax Act, subsequent amendments or corrections, or the actions of the FERC, state utility commissions or credit rating agencies related to the Tax Act.

The Duke Energy Registrants are subject to regulation 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. The Duke Energy Registrants cannot predict the future course of regulatory changes or the ultimate effect those changes will have on their businesses. However, changes in regulation can cause delays in or affect business planning and transactions and can substantially increase the Duke Energy Registrants' costs.

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' financial position, results of operations or 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 recently enacted or proposed new federal regulations governing the management of cooling water intake structures, wastewater and CO<sub>2</sub> emissions. These regulations may require the Duke Energy Registrants to make additional capital expenditures and increase operating and maintenance costs.

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

There is continued concern, both nationally and internationally, about climate change. The EPA may adopt and implement regulations to restrict emissions of GHGs. 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. At this time, the effect that climate change regulation may have in the future on Duke Energy's business, financial condition or results of operations is not able to be predicted.

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### Operational Risks

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

Sustained downturns or sluggishness in the economy generally affect the markets in which the Duke Energy Registrants operate and negatively influence operations. Declines in demand for electricity or natural gas as a result of economic downturns in the Duke Energy Registrants' regulated service territories will reduce overall sales and lessen cash flows, especially as industrial customers reduce production and, therefore, consumption of electricity and the use of natural gas. Although the Duke Energy Registrants' regulated electric and natural gas businesses are subject to regulated allowable rates of return and recovery of certain costs, such as fuel and purchased natural gas costs, under periodic adjustment clauses, overall declines in electricity or natural gas sold as a result of economic downturn or recession could reduce revenues and cash flows, thereby diminishing results of operations. Additionally, prolonged economic downturns that negatively impact the Duke Energy Registrants' results of operations and cash flows could result in future material impairment charges to write-down the carrying value of certain assets, including goodwill, to their respective fair values.

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

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

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

Natural disasters or operational accidents may adversely affect the Duke Energy Registrants' operating results. Natural disasters (such as electromagnetic events or the 2011 earthquake and tsunami in Japan) or other operational accidents within the company or industry (such as the San Bruno, California natural gas transmission pipeline failure) could have direct significant impacts on the Duke Energy Registrants as well as on key contractors and suppliers. Such events could indirectly impact the Duke Energy Registrants through changes to policies, laws and regulations whose compliance costs have a significant impact on the Duke Energy Registrants' financial position, results of operations and cash flows.

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 general public health concerns. Such a CCR-related incident could have a material adverse impact on the reputation and financial condition 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 financial position, results of operations and cash flows of the Duke Energy Registrants. The Duke Energy Registrants intend 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.

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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.

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 financial position, results of operations 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 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.



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Duke Energy may be unable to complete necessary or desirable pipeline expansion or infrastructure development or maintenance projects, which may delay or prevent the Duke Energy Registrants from serving natural gas customers or 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. Various factors, such as the inability to obtain required approval from local, state and/or federal regulatory and governmental bodies, public opposition to projects, 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 increase costs. As a result, the Duke Energy Registrants may be unable to adequately serve existing natural gas customers or support customer growth or could incur higher than anticipated costs, which could have a negative financial impact.

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 condition, 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.

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, derivative collateral with counterparties, depending on the daily derivative position. Fluctuations in commodity prices that lead to the return of collateral received and/or the posting of collateral with counterparties 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. The potential for terrorism has subjected the Duke Energy Registrants' operations to increased risks and could have a material adverse effect on their 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.

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

Information security risks have generally increased in recent years as a result of the proliferation of new technologies and the increased sophistication and frequency of cyberattacks and data security breaches. The utility industry requires the continued operation of sophisticated information technology systems and network infrastructure, which are part of an interconnected regional grid. Additionally, connectivity to the internet continues to increase through smart grid and other 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. In the event of such an attack, the Duke Energy Registrants could (i) have business operations disrupted, property damaged, customer information stolen and other private information accessed, (ii) experience substantial loss of revenues, repair and restoration costs, 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.

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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 financial position, results of operations or cash flows could be negatively affected.

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

Costs to retire and 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 financial condition, results of operations 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 condition 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. While RTO transmission rates were initially designed to be revenue neutral, various proposals and proceedings currently taking place by the FERC may cause transmission rates to change from time to time. 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 Duke Energy Ohio and Duke Energy Indiana.

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

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

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

### 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 interest 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 condition, cash flows and reputation of the Duke Energy Registrants.

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### Liquidity, Capital Requirements and Common Stock Risks

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

The Duke Energy Registrants' businesses are significantly financed through issuances of debt and equity. The maturity and repayment profile of debt used to finance investments often does not correlate to cash flows from their assets. Accordingly, as a source of liquidity for capital requirements not satisfied by the cash flows from their operations and to fund investments originally financed through debt instruments with disparate maturities, the Duke Energy Registrants rely on access to short-term money markets as well as longer-term capital markets. The Subsidiary Registrants also rely on access to short-term intercompany borrowings. If the Duke Energy Registrants are not able to access debt or equity at competitive rates or at all, the ability to finance their operations and implement their strategy and business plan as scheduled could be adversely affected. An inability to access debt and equity may limit the Duke Energy Registrants' ability to pursue improvements or acquisitions that they may otherwise rely on for future growth. Market disruptions may increase the cost of borrowing or adversely affect the ability to access one or more financial markets. Such disruptions could include: economic downturns, the bankruptcy of an unrelated energy company, unfavorable capital market conditions, market prices for electricity and natural gas, actual or threatened terrorist attacks, or the overall health of the energy industry. The availability of credit under Duke Energy's Master Credit Facility depends upon the ability of the banks providing commitments under the facility to provide funds when their obligations to do so arise. Systematic risk of the banking system and the financial markets could prevent a bank from meeting its obligations under the facility agreement.

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

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

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

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

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

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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' financial position, results of operations or 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.

## PART I

## 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, 2017. 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 <sup>(a)</sup>	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 Combustion Turbine (CT)	Fossil	Gas/Oil	NC	1,193
Allen	Fossil	Coal	NC	1,098
Rockingham CT	Fossil	Gas/Oil	NC	825
Buck Combined Cycle (CC)	Fossil	Gas	NC	668
Dan River CC	Fossil	Gas	NC	662
Mill Creek CT	Fossil	Gas/Oil	SC	563
W.S. Lee	Fossil	Gas	SC	170
W.S. Lee CT	Fossil	Gas/Oil	SC	84
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 (25 plants)	Hydro	Water	NC/SC	669
Distributed generation	Renewable	Solar	NC	39
Total Duke Energy Carolinas				19,568

Facility	Plant Type	Primary Fuel	Location	Owned MW Capacity
Duke Energy Progress				
Brunswick	Nuclear	Uranium	NC	1,870
Harris	Nuclear	Uranium	NC	928
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	664
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				