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

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

Goodwill Impairment Assessments

Duke Energy performed its annual goodwill impairment tests for all reporting units as of August 31, 2020. Additionally, Duke Energy monitors all relevant events and circumstances during the year to determine if an interim impairment test is required. Such events and circumstances include an adverse regulatory outcome, declining financial performance and deterioration of industry or market conditions. As of August 31, 2020, all of the reporting units' estimated fair value of equity substantially exceeded the carrying value of equity. The fair values of the reporting units were calculated using a weighted combination of the income approach, which estimates fair value based on discounted cash flows, and the market approach, which estimates fair value based on market comparables within the utility and energy industries.

Estimated future cash flows under the income approach are based on Duke Energy's internal business plan. Significant assumptions used are growth rates, future rates of return expected to result from ongoing rate regulation and discount rates. Management determines the appropriate discount rate for each of its reporting units based on the WACC for each individual reporting unit. The WACC takes into account both the after-tax cost of debt and cost of equity. A major component of the cost of equity is the current risk-free rate on 20-year U.S. Treasury bonds. In the 2020 impairment tests, Duke Energy considered implied WACCs for certain peer companies in determining the appropriate WACC rates to use in its analysis. As each reporting unit has a different risk profile based on the nature of its operations, including factors such as regulation, the WACC for each reporting unit may differ. Accordingly, the WACCs were adjusted, as appropriate, to account for company specific risk premiums. The discount rates used for calculating the fair values as of August 31, 2020, for each of Duke Energy's reporting units ranged from 5.2% to 5.7%. The underlying assumptions and estimates are made as of a point in time. Subsequent changes, particularly changes in the discount rates, authorized regulated rates of return or growth rates inherent in management's estimates of future cash flows, could result in future impairment charges.

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

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

For further information, see Note 11 to the Consolidated Financial Statements, "Goodwill and Intangible Assets."

Asset Retirement Obligations

AROs are recognized for legal obligations associated with the retirement of property, plant and equipment at the present value of the projected liability in the period in which it is incurred, if a reasonable estimate of fair value can be made.

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

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

Obligations for closure of ash basins are based upon discounted cash flows of estimated costs for site-specific plans. During 2020, the Hoosier Environmental Council filed a Petition for Administrative Review with the Indiana Office of Environmental Adjudication challenging the Indiana Department of Environmental Management's partial approval of Duke Energy Indiana's ash pond closure plan. Due to these challenges, in 2020, Duke Energy Indiana remeasured and increased the closure estimates for certain coal ash impoundments.

For further information, see Notes 3, 4 and 9 to the Consolidated Financial Statements, "Regulatory Matters," "Commitments and Contingencies" and "Asset Retirement Obligations."

Long-Lived Asset Impairment Assessments, Excluding Regulated Operations, and Equity Method Investments

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

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

When determining whether an asset or asset group has been impaired, management groups assets at the lowest level that has discrete cash flows. Investments in affiliates that are not controlled by Duke Energy, but over which it has significant influence, are accounted for using the equity method. Equity method investments are assessed for impairment when conditions exist that indicate that the fair value of the investment is less than book value. It the decline in value is considered to be other than temporary, the investment is written down to its estimated fair value, which establishes a new cost basis in the investment.

During 2020, Duke Energy evaluated recoverability of certain renewable merchant plants due to declining market pricing and declining long-term forecasted energy prices, primarily driven by lower forecasted natural gas prices, capital cost of new renewables and increase renewable penetration. It was determined the assets were all recoverable as the carrying value of the assets approximated or exceeded the aggregate estimated future cash flows.

For further information, see Notes 2, 10 and 12 to the Consolidated Financial Statements, "Business Segments," "Property, Plant and Equipment" and "Investments in Unconsolidated Affiliates."

Pension and Other Post-Retirement Benefits

The calculation of pension expense, other post-retirement benefit expense and net pension and other post-retirement assets or liabilities require the use of assumptions and election of permissible accounting alternatives. Changes in assumptions can result in different expense and reported asset or liability amounts and future actual experience can differ from the assumptions. Duke Energy believes the most critical assumptions for pension and other post-retirement benefits are the expected long-term rate of return on plan assets and the assumed discount rate applied to future projected benefit payments.

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

As of December 31, 2020, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.50%. The expected long-term rate of return was developed using a weighted average calculation of expected returns based primarily on future expected returns across asset classes considering the use of active asset managers, where applicable. The asset allocation targets were set after considering the investment objective and the risk profile. Equity securities are held for their higher expected returns. Debt securities are primarily held to hedge the qualified pension liability. Real assets, return-seeking fixed income, hedge funds and other global securities are held for diversification. Investments within asset classes are diversified to achieve broad market participation and reduce the impact of individual managers on investments.

Duke Energy discounted its future U.S. pension and other post-retirement obligations using a rate of 2.60% as of December 31, 2020. Discount rates used to measure benefit plan obligations for financial reporting purposes reflect rates at which pension benefits could be effectively settled. As of December 31, 2020, Duke Energy determined its discount rate for U.S. pension and other post-retirement obligations using a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high-quality corporate bonds that generate sufficient cash flow to provide for projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

Future changes in plan asset returns, assumed discount rates and various other factors related to the participants in Duke Energy's pension and post-retirement plans will impact future pension expense and liabilities. Duke Energy cannot predict with certainty what these factors will be in the future. The following table presents the approximate effect on Duke Energy's 2020 pretax pension expense, pretax other post-retirement expense, pension obligation and other post-retirement benefit obligation if a 0.25% change in rates were to occur.

	Qualified and Non-Qualified Pension Plans		Other Post-Retirement Plans	
(in millions)	**0.25%**	**(0.25)%**	**0.25%**	**(0.25)%**
Effect on 2020 pretax pension and other post-retirement expense:				
Expected long-term rate of return	$ (21)	$ 21	$ (1)	$ 1
Discount rate	(9)	9	—	(1)
Effect on pension and other post-retirement benefit obligation at December 31, 2020:				
Discount rate	(208)	213	(13)	14

Duke Energy's other post-retirement plan uses a health care cost trend rate covering both pre- and post-age 65 retired plan participants, which is comprised of a medical care cost trend rate, which reflects the near- and long-term expectation of increases in medical costs, and a prescription drug cost trend rate, which reflects the near- and long-term expectation of increases in prescription drug costs. As of December 31, 2020, the health care cost trend rate was 6.25%, trending down to 4.75% by 2028. These plans are closed to new employees.

For further information, see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans."

LIQUIDITY AND CAPITAL RESOURCES

Sources and Uses of Cash

Duke Energy relies primarily upon cash flows from operations, debt and equity issuances and its existing cash and cash equivalents to fund its liquidity and capital requirements. Duke Energy's capital requirements arise primarily from capital and investment expenditures, repaying long-term debt and paying dividends to shareholders.

Among other provisions, the Tax Act lowered the corporate federal income tax rate from 35% to 21% and eliminated bonus depreciation for regulated utilities. For Duke Energy's regulated operations, the reduction in federal income taxes will result in lower regulated customer rates. However, due to its existing NOL position and other tax credits, Duke Energy does not expect to be a significant federal cash taxpayer through at least 2029. As a result, any reduction in customer rates could cause a material reduction in consolidated cash flows from operations in the short term. Over time, the reduction in deferred tax liabilities resulting from the Tax Act will increase Duke Energy's regulated rate base investments and customer rates. Impacts of the Tax Act to Duke Energy's cash flows and credit metrics are subject to the regulatory actions of its state commissions and the FERC. See Note 3 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

The Subsidiary Registrants generally maintain minimal cash balances and use short-term borrowings to meet their working capital needs and other cash requirements. The Subsidiary Registrants, excluding Progress Energy, support their short-term borrowing needs through participation with Duke Energy and certain of its other subsidiaries in a money pool arrangement. The companies with short-term funds may provide short-term loans to affiliates participating under this arrangement. See Note 6 to the Consolidated Financial Statements, "Debt and Credit Facilities," for additional discussion of the money pool arrangement.

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

During March 2020, in response to market volatility and the ongoing economic uncertainty related to COVID-19, Duke Energy took several actions to enhance the company's liquidity position including:

- Duke Energy drew down the remaining $500 million of availability under the existing $1 billion Three-Year Revolving Credit Facility. That additional borrowing was subsequently repaid during the second quarter of 2020; and
- Duke Energy entered into and borrowed the full amount under a $1.5 billion, 364-day Term Loan Credit Agreement. The Term Loan Credit Agreement contained a provision for additional borrowing capacity of $500 million. Duke Energy exercised the provision and borrowed an additional $188 million, for a total borrowing of approximately $1.7 billion. By November 2020, Duke Energy repaid the entire borrowing under the 364-day Term Loan.

Following March 2020, access to credit and equity markets has normalized. In addition to the March 2020 financings to address the company's liquidity position, for the year ended December 31, 2020, Duke Energy issued approximately $5.6 billion in debt and raised approximately $2.9 billion of common equity through equity forward agreements and the company's dividend reinvestment and ATM programs. A portion of the proceeds from the equity forward settlements will be used to fully repay Duke Energy's portion of the ACP construction loan of approximately $860 million. Despite the recovery in capital markets, Duke Energy continues to monitor access to credit and equity markets amid the ongoing economic uncertainty related to COVID-19.

In addition to actions taken by the company, the CARES Act, enacted in March 2020, as an emergency economic stimulus package in response to the COVID-19 pandemic, included provisions providing relief to entities with remaining AMT credit refund allowances. Through the CARES Act, Duke Energy accelerated remaining AMT credit refund allowances and claimed a refund in full for any AMT credit carryforwards. As a result, in the third quarter of 2020, Duke Energy received $572 million related to AMT credit carryforwards and $19 million of interest income. See Note 23 to the Consolidated Financial Statements, "Income Taxes," for additional information.

As of December 31, 2020, Duke Energy had approximately $259 million of cash on hand, $5.6 billion available under its $8 billion Master Credit Facility and $500 million available under the $1 billion Three-Year Revolving Credit Facility. Duke Energy expects to have sufficient liquidity in the form of cash on hand, cash from operations and available credit capacity to support its funding needs. Refer to Notes 6 and 19 to the Consolidated Financial Statements, "Debt and Credit Facilities" and "Stockholders' Equity," respectively, for information regarding Duke Energy's debt and equity issuances, debt maturities and available credit facilities including the Master Credit Facility.

Credit Facilities and Registration Statements

See Note 6 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding credit facilities and shelf registration statements available to Duke Energy and the Duke Energy Registrants.

CAPITAL EXPENDITURES

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

(in millions)	2021	2022	2023
New generation	$ 60	$ 20	$ 85
Regulated renewables	665	710	755
Environmental	795	820	600
Nuclear fuel	425	400	380
Major nuclear	280	270	205
Customer additions	565	555	560
Grid modernization and other transmission and distribution projects	3,460	5,025	4,840
Maintenance and other	2,200	2,650	2,750
Total Electric Utilities and Infrastructure	8,450	10,450	10,175
Gas Utilities and Infrastructure	1,250	1,275	1,150
Commercial Renewables and Other	775	1,075	750
Total projected capital and investment expenditures	$ 10,475	$ 12,800	$ 12,075

DEBT MATURITIES

See Note 6 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding significant components of Current Maturities of Long-Term Debt on the Consolidated Balance Sheets.

DIVIDEND PAYMENTS

In 2020, Duke Energy paid quarterly cash dividends for the 94th consecutive year and expects to continue its policy of paying regular cash dividends in the future. There is no assurance as to the amount of future dividends because they depend on future earnings, capital requirements, financial condition and are subject to the discretion of the Board of Directors.

Duke Energy targets a dividend payout ratio of between 65% and 75%, based upon adjusted EPS, and expects this trend to continue through 2025. Duke Energy increased the dividend by approximately 2% annually in both 2020 and 2019, and the company remains committed to continued growth of the dividend.

Dividend and Other Funding Restrictions of Duke Energy Subsidiaries

As discussed in Note 3 to the Consolidated Financial Statements, "Regulatory Matters," Duke Energy's wholly owned public utility operating companies have restrictions on the amount of funds that can be transferred to Duke Energy through dividends, advances or loans as a result of conditions imposed by various regulators in conjunction with merger transactions. Duke Energy Progress and Duke Energy Florida also have restrictions imposed by their first mortgage bond indentures and Articles of Incorporation, which in certain circumstances, limit their ability to make cash dividends or distributions on common stock. Additionally, certain other Duke Energy subsidiaries have other restrictions, such as minimum working capital and tangible net worth requirements pursuant to debt and other agreements that limit the amount of funds that can be transferred to Duke Energy. At December 31, 2020, the amount of restricted net assets of wholly owned subsidiaries of Duke Energy that may not be distributed to Duke Energy in the form of a loan or dividend does not exceed a material amount of Duke Energy's net assets. Duke Energy does not have any legal or other restrictions on paying common stock dividends to shareholders out of its consolidated equity accounts. Although these restrictions cap the amount of funding the various operating subsidiaries can provide to Duke Energy, management does not believe these restrictions will have a significant impact on Duke Energy's ability to access cash to meet its payment of dividends on common stock and other future funding obligations.

CASH FLOWS FROM OPERATING ACTIVITIES

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

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

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

DEBT ISSUANCES

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

In 2021, Duke Energy anticipates issuing additional securities of $8 billion through debt capital markets. Additionally, Duke Energy may utilize other instruments, including equity-content securities, such as preferred stock. Proceeds will primarily be for the purpose of funding capital expenditures and debt maturities. See to Note 6 to the Consolidated Financial Statements, "Debt and Credit Facilities," for further information regarding significant debt issuances in 2020.

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

	Projected 2021	Actual 2020	Actual 2019
Equity	44%	**44%**	44%
Debt	56%	**56%**	56%

Restrictive Debt Covenants

Duke Energy's debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio to not exceed 65% for each borrower, excluding Piedmont, and 70% for Piedmont. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements or sublimits thereto. As of December 31, 2020, each of the Duke Energy Registrants was in compliance with all covenants related to their debt agreements. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

Credit Ratings

Moody's Investors Service, Inc. and S&P provide credit ratings for various Duke Energy Registrants. During January 2021, S&P downgraded the issuer credit rating for Duke Energy (Parent) and all of its subsidiaries senior unsecured debt, excluding Progress Energy, from A- to BBB+. Additionally, S&P downgraded the credit rating for Duke Energy (Parent) and Progress Energy senior unsecured debt from BBB+ to BBB. As part of the credit rating report, S&P affirmed their credit rating on senior secured debt for Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio and Duke Energy Indiana, while also affirming the short-term and commercial paper credit ratings. These actions followed a December 2020, report by S&P to revise the credit rating outlook from stable to negative for Duke Energy and all its subsidiaries. As a result of the downgrade, credit rating outlooks returned to stable. Additionally, during October 2020, Moody's revised their credit rating outlook for Duke Energy (Parent), Duke Energy Carolinas and Duke Energy Progress from stable to negative and in February 2021, revised the credit rating outlook for these same registrants to review for downgrade. The following table includes Duke Energy and certain subsidiaries' credit ratings and ratings outlook as of February 2021.

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

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

Cash Flow Information

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

	Years Ended December 31,	
(in millions)	2020	2019
Cash flows provided by (used in):		
Operating activities	$ 8,856	$ 8,209
Investing activities	(10,604)	(11,957)
Financing activities	1,731	3,730
Net decrease in cash, cash equivalents and restricted cash	(17)	(18)
Cash, cash equivalents and restricted cash at beginning of period	573	591
Cash, cash equivalents and restricted cash at end of period	$ 556	$ 573

OPERATING CASH FLOWS

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

	Years Ended December 31,		
(in millions)	2020	2019	Variance
Net income	$ 1,082	$ 3,571	$ (2,489)
Non-cash adjustments to net income	8,343	5,737	2,606
Payments for AROs	(610)	(746)	136
Refund of AMT credit carryforwards	572	573	(1)
Working capital	(531)	(926)	395
Net cash provided by operating activities	$ 8,856	$ 8,209	$ 647

The variance was driven primarily by:

- a $117 million increase in net income after adjustment for non-cash items primarily due to increases in current year non-cash adjustments, partially offset by decreases in revenues due to lower sales volumes, accelerated refund of fuel costs at Duke Energy Florida in response to the COVID-19 pandemic and lower wholesale revenue driven by the CCR Settlement Agreement;
- a $395 million decrease in cash outflows from working capital primarily due to fluctuations in inventory levels, accounts payable levels and lower income taxes paid in the current year; and
- a $136 million decrease in payments for AROs.

INVESTING CASH FLOWS

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

	Years Ended December 31,		
(in millions)	2020	2019	Variance
Capital, investment and acquisition expenditures, net of return of investment capital	$ (10,144)	$ (11,435)	$ 1,291
Debt and equity securities, net	(62)	(5)	(57)
Other investing items	(398)	(517)	119
Net cash used in investing activities	$ (10,604)	$ (11,957)	$ 1,353

The primary use of cash related to investing activities is capital, investment and acquisition expenditures, net of return of investment capital detailed by reportable business segment in the following table. The decrease relates primarily to decreases in capital expenditures due to lower overall investments in the Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables segments.

	Years Ended December 31,		
(in millions)	2020	2019	Variance
Electric Utilities and Infrastructure	$ 7,629	$ 8,258	$ (629)
Gas Utilities and Infrastructure	1,309	1,533	(224)
Commercial Renewables	1,075	1,423	(348)
Other	264	221	43
Total capital, investment and acquisition expenditures, net of return of investment capital	$ 10,277	$ 11,435	$ (1,158)

FINANCING CASH FLOWS

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

	Years Ended December 31,		
(in millions)	2020	2019	Variance
Issuance of common stock	$ 2,745	$ 384	$ 2,361
Issuance of preferred stock	—	1,962	(1,962)
Issuances of long-term debt, net	1,824	3,615	(1,791)
Notes payable and commercial paper	(319)	(380)	61
Dividends paid	(2,812)	(2,668)	(144)
Contributions from noncontrolling interests	426	843	(417)
Other financing items	(133)	(26)	(107)
Net cash provided by financing activities	$ 1,731	$ 3,730	$ (1,999)

The variance was driven primarily by:

- a $1,962 million decrease in proceeds from the issuance of preferred stock;
- a $1,791 million net decrease in proceeds from issuances of long-term debt primarily due to timing of issuances and redemptions of long-term debt; and
- a $417 million decrease in contributions from noncontrolling interests, primarily due to $415 million related to the sale of a noncontrolling interest in the Commercial Renewables segment in 2019.

Partially offset by:

- a $2,361 million increase in proceeds from the issuance of common stock, primarily from the settlement of equity forwards.

Off-Balance Sheet Arrangements

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

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

Duke Energy performs ongoing assessments of its respective guarantee obligations to determine whether any liabilities have been incurred as a result of potential increased nonperformance risk by third parties for which Duke Energy has issued guarantees. See Note 7 to the Consolidated Financial Statements, "Guarantees and Indemnifications," for further details of the guarantee arrangements. Issuance of these guarantee arrangements is not required for the majority of Duke Energy's operations. Thus, if Duke Energy discontinued issuing these guarantees, there would not be a material impact to the consolidated results of operations, cash flows or financial position.

Other than the guarantee arrangements discussed above and off-balance sheet debt related to non-consolidated VIEs, Duke Energy does not have any material off-balance sheet financing entities or structures. For additional information, see Note 17 to the Consolidated Financial Statements, "Variable Interest Entities."

Contractual Obligations

Duke Energy enters into contracts that require payment of cash at certain specified periods, based on certain specified minimum quantities and prices. The following table summarizes Duke Energy's contractual cash obligations as of December 31, 2020.

	Payments Due By Period				
(in millions)	Total	Less than 1 year (2021)	2-3 years (2022 & 2023)	4-5 years (2024 & 2025)	More than 5 years (2026 & beyond)
Long-term debt[a]	$ 58,134	$ 4,110	$ 8,011	$ 4,408	$ 41,605
Interest payments on long-term debt[b]	33,858	2,099	3,898	3,577	24,284
Finance leases[c]	1,465	186	347	170	762
Operating leases[c]	1,861	229	414	348	870
Purchase obligations:[d]					
Fuel and purchased power[e][f]	16,591	3,489	4,248	2,998	5,856
Other purchase obligations[g]	9,916	8,850	974	52	40
Nuclear decommissioning trust annual funding[h]	363	20	40	40	263
Land easements[i]	400	12	24	24	340
Total contractual cash obligations[j][k]	$ 122,588	$ 18,995	$ 17,956	$ 11,617	$ 74,020

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

(b) Interest payments on variable rate debt instruments were calculated using December 31, 2020, interest rates and holding them constant for the life of the instruments.

(c) See Note 5 to the Consolidated Financial Statements, "Leases." Amounts in the table above include the interest component of finance leases based on the interest rates stated in the lease agreements and exclude certain related executory costs. Amounts exclude contingent lease obligations.

(d) Current liabilities, except for current maturities of long-term debt, and purchase obligations reflected on the Consolidated Balance Sheets have been excluded from the above table.

(e) Includes firm capacity payments that provide Duke Energy with uninterrupted firm access to electricity transmission capacity and natural gas transportation contracts, as well as undesignated contracts and contracts that qualify as NPNS. For contracts where the price paid is based on an index, the amount is based on market prices at December 31, 2020, or the best projections of the index. For certain of these amounts, Duke Energy may settle on a net cash basis since Duke Energy has entered into payment netting arrangements with counterparties that permit Duke Energy to offset receivables and payables with such counterparties.

(f) Amounts exclude obligations under the OVEC PPA. See Note 17 to the Consolidated Financial Statements, "Variable Interest Entities," for additional information.

(g) Includes contracts for software, telephone, data and consulting or advisory services. Amount also includes contractual obligations for EPC costs for new generation plants, wind and solar facilities, plant refurbishments, maintenance and day-to-day contract work and commitments to buy certain products. Amount excludes certain open purchase orders for services that are provided on demand for which the timing of the purchase cannot be determined.

(h) Related to future annual funding obligations to NDTF through nuclear power stations' relicensing dates. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations."

(i) Related to Commercial Renewables wind facilities.

(j) Unrecognized tax benefits of $125 million are not reflected in this table as Duke Energy cannot predict when open income tax years will close with completed examinations. See Note 23 to the Consolidated Financial Statements, "Income Taxes."

(k) The table above excludes reserves for litigation, environmental remediation, asbestos-related injuries and damages claims and self-insurance claims (see Note 4 to the Consolidated Financial Statements, "Commitments and Contingencies") because Duke Energy is uncertain as to the timing and amount of cash payments that will be required. Additionally, the table above excludes annual insurance premiums that are necessary to operate the business, including nuclear insurance (see Note 4 to the Consolidated Financial Statements, "Commitments and Contingencies"), funding of pension and other post-retirement benefit plans (see Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans"), AROs, including ash management expenditures (see Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations") and regulatory liabilities (see Note 3 to the Consolidated Financial Statements, "Regulatory Matters") because the amount and timing of the cash payments are uncertain. Also excluded are Deferred Income Taxes and ITCs recorded on the Consolidated Balance Sheets since cash payments for income taxes are determined based primarily on taxable income for each discrete fiscal year.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Risk Management Policies

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

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

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

Commodity Price Risk

Duke Energy is exposed to the impact of market fluctuations in the prices of electricity, coal, natural gas and other energy-related products marketed and purchased as a result of its ownership of energy-related assets. Duke Energy's exposure to these fluctuations is primarily limited by the cost-based regulation of its regulated operations as these operations are typically allowed to recover substantially all of these costs through various cost-recovery clauses, including fuel clauses, formula-based contracts, or other cost-sharing mechanisms. While there may be a delay in timing between when these costs are incurred and when they are recovered through rates, changes from year to year generally do not have a material impact on operating results of these regulated operations. Within Duke Energy's Commercial Renewables segment, the company has limited exposure to market price fluctuations in prices of energy-related products as a result of its ownership of renewable assets.

Price risk represents the potential risk of loss from adverse changes in the market price of electricity or other energy commodities. Duke Energy's exposure to commodity price risk is influenced by a number of factors, including contract size, length, market liquidity, market conditions, location and unique or specific contract terms. Duke Energy employs established policies and procedures to manage risks associated with these market fluctuations, which may include using various commodity derivatives, such as swaps, futures, forwards and options. For additional information, see Note 14 to the Consolidated Financial Statements, "Derivatives and Hedging."

Hedging Strategies

Duke Energy closely monitors risks associated with commodity price changes on its future operations and, where appropriate, uses various commodity instruments such as electricity, coal and natural gas forward contracts and options to mitigate the effect of such fluctuations on operations. Duke Energy's primary use of energy commodity derivatives is to hedge against exposure to the prices of power, fuel for generation and natural gas for customers. Additionally, Duke Energy's Commercial Renewables business may enter into short-term or long-term hedge agreements to manage price risk associated with project output.

The majority of instruments used to manage Duke Energy's commodity price exposure are either not designated as hedges or do not qualify for hedge accounting. These instruments are referred to as undesignated contracts. Mark-to-market changes for undesignated contracts entered into by regulated businesses are reflected as regulatory assets or liabilities on the Consolidated Balance Sheets. Undesignated contracts entered into by nonregulated businesses are marked-to-market each period, with changes in the fair value of the derivative instruments reflected in earnings.

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

Generation Portfolio Risks

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

For the Electric Utilities and Infrastructure segment, the generation portfolio not utilized to serve retail operations or committed load is subject to commodity price fluctuations. However, the impact on the Consolidated Statements of Operations is partially offset by mechanisms in these regulated jurisdictions that result in the sharing of net profits from these activities with retail customers.

Interest Rate Risk

Duke Energy is exposed to risk resulting from changes in interest rates as a result of its issuance or anticipated issuance of variable and fixed-rate debt and commercial paper. Duke Energy manages interest rate exposure by limiting variable-rate exposures to a percentage of total debt and by monitoring the effects of market changes in interest rates. Duke Energy also enters into financial derivative instruments, which may include instruments such as, but not limited to, interest rate swaps, swaptions and U.S. Treasury lock agreements to manage and mitigate interest rate risk exposure. See Notes 1, 6, 14 and 16 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies," "Debt and Credit Facilities," "Derivatives and Hedging," and "Fair Value Measurements."

Duke Energy had $7.6 billion of unhedged long- and short-term floating interest rate exposure at December 31, 2020. The impact of a 100-basis point change in interest rates on pretax income is approximately $76 million at December 31, 2020. This amount was estimated by considering the impact of the hypothetical interest rates on variable-rate securities outstanding, adjusted for interest rate hedges as of December 31, 2020.

Certain Duke Energy Registrants have variable-rate debt and manage interest rate risk by entering into financial contracts including interest rate swaps. See Notes 6 and 14 to the Consolidated Financial Statements, "Debt and Credit Facilities" and "Derivatives and Hedging." Such financial arrangements generally are indexed based upon LIBOR, which is expected to be phased out by the end of 2021. The Secured Overnight Financing Rate (SOFR) has been identified by regulators and industry participants as the preferred successor rate for U.S. dollar-based LIBOR at that time. Impacted financial arrangements extending beyond 2021 may require contractual amendment or termination and renegotiation to fully adapt to a post-LIBOR environment, and there may be uncertainty regarding the effectiveness of any such alternative index methodologies. Alternative index provisions are being assessed and incorporated into new financial arrangements that extend beyond 2021. Additionally, the progress of the phaseout is being monitored, including proposed transition relief from the FASB.

Credit Risk

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

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

The Duke Energy Registrants also obtain cash, letters of credit, or surety bonds from certain counterparties to provide credit support outside of collateral agreements, where appropriate, based on a financial analysis of the counterparty and the regulatory or contractual terms and conditions applicable to each transaction. See Note 14 to the Consolidated Financial Statements, "Derivatives and Hedging," for additional information regarding credit risk related to derivative instruments.

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

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

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

In response to the COVID-19 pandemic, in March 2020, the Duke Energy Registrants announced a suspension of disconnections for nonpayment to be effective throughout the national emergency. While disconnections have resumed, the company continues to offer flexible options to customers struggling with the pandemic and the economic fallout, including extended payment arrangements to satisfy delinquent balances. In addition, the Duke Energy Registrants are monitoring the effects of the resultant economic slowdown on counterparties' abilities to perform under their contractual obligations. The Duke Energy Registrants have observed a significant increase in utility account arrears, which were roughly double historical levels as of December 31, 2020. There is an expectation of an increase in charge-offs in the future. See Notes 1, 3 and 18 to the Consolidated Financial Statements, "Summary of Significant Accounting Policies," "Regulatory Matters" and "Revenue," respectively, for more information. Duke Energy Ohio and Duke Energy Indiana sell certain of their accounts receivable and related collections through CRC, a Duke Energy consolidated VIE. Losses on collection are first absorbed by the equity of CRC and next by the subordinated retained interests held by Duke Energy Ohio, Duke Energy Kentucky and Duke Energy Indiana. See Note 17 to the Consolidated Financial Statements, "Variable Interest Entities."

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

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

Duke Energy Carolinas has third-party insurance to cover certain losses related to asbestos-related injuries and damages above an aggregate self-insured retention. See Note 4 to the Consolidated Financial Statements, "Commitments and Contingencies" for information on asbestos-related injuries and damages claims.

The Duke Energy Registrants also have credit risk exposure through issuance of performance and financial guarantees, letters of credit and surety bonds on behalf of less than wholly owned entities and third parties. Where the Duke Energy Registrants have issued these guarantees, it is possible that they could be required to perform under these guarantee obligations in the event the obligor under the guarantee fails to perform. Where the Duke Energy Registrants have issued guarantees related to assets or operations that have been disposed of via sale, they attempt to secure indemnification from the buyer against all future performance obligations under the guarantees. See Note 7 to the Consolidated Financial Statements, "Guarantees and Indemnifications," for further information on guarantees issued by the Duke Energy Registrants.

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

Marketable Securities Price Risk

As described further in Note 15 to the Consolidated Financial Statements, "Investments in Debt and Equity Securities," Duke Energy invests in debt and equity securities as part of various investment portfolios to fund certain obligations. The vast majority of investments in equity securities are within the NDTF and assets of the various pension and other post-retirement benefit plans.

Pension Plan Assets

Duke Energy maintains investments to facilitate funding the costs of providing non-contributory defined benefit retirement and other post-retirement benefit plans. These investments are exposed to price fluctuations in equity markets and changes in interest rates. The equity securities held in these pension plans are diversified to achieve broad market participation and reduce the impact of any single investment, sector or geographic region. Duke Energy has established asset allocation targets for its pension plan holdings, which take into consideration the investment objectives and the risk profile with respect to the trust in which the assets are held. See Note 22 to the Consolidated Financial Statements, "Employee Benefit Plans," for additional information regarding investment strategy of pension plan assets.

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

Nuclear Decommissioning Trust Funds

As required by the NRC, NCUC, PSCSC and FPSC, subsidiaries of Duke Energy maintain trust funds to fund the costs of nuclear decommissioning. As of December 31, 2020, these funds were invested primarily in domestic and international equity securities, debt securities, cash and cash equivalents and short-term investments. Per the NRC, Internal Revenue Code, NCUC, PSCSC and FPSC requirements, these funds may be used only for activities related to nuclear decommissioning. These investments are exposed to price fluctuations in equity markets and changes in interest rates. Duke Energy actively monitors its portfolios by benchmarking the performance of its investments against certain indices and by maintaining, and periodically reviewing, target allocation percentages for various asset classes.

Accounting for nuclear decommissioning recognizes that costs are recovered through retail and wholesale rates; therefore, fluctuations in investment prices do not materially affect the Consolidated Statements of Operations, as changes in the fair value of these investments are primarily deferred as regulatory assets or regulatory liabilities pursuant to Orders by the NCUC, PSCSC, FPSC and FERC. Earnings or losses of the funds will ultimately impact the amount of costs recovered through retail and wholesale rates. See Note 9 to the Consolidated Financial Statements, "Asset Retirement Obligations," for additional information regarding nuclear decommissioning costs. See Note 15 to the Consolidated Financial Statements, "Investments in Debt and Equity Securities," for additional information regarding NDTF assets.

OTHER MATTERS

Environmental Regulations

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

On May 14, 2020, the five-year probation period following the Dan River coal ash spill ended. The court-appointed monitor confirmed in U.S. District Court for the Eastern District of North Carolina that Duke Energy met or exceeded every obligation throughout the process. Separately, in a final report to the EPA, it was noted that the company made significant enhancements to its Ethics and Compliance Program and its environmental compliance programs.

The following sections outline various proposed and recently enacted legislation and regulations that may impact the Duke Energy Registrants. Refer to Note 3 to the Consolidated Financial Statements, "Regulatory Matters," for further information regarding potential plant retirements and regulatory filings related to the Duke Energy Registrants.

Coal Combustion Residuals

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

On July 17, 2018, EPA issued a final rule (Phase 1, Part 1) revising certain closure deadlines and groundwater protection standards in the CCR rule. The rule does not change the primary requirements for groundwater monitoring, corrective action, inspections and maintenance, and closure, and thus does not materially affect Duke Energy's coal ash basin closure plans or compliance obligations under the CCR rule. On October 22, 2018, a coalition of environmental groups filed a petition for review in the U.S. Court of Appeals for the District of Columbia (D.C. Circuit Court) challenging EPA's final Phase 1, Part 1 revisions to the CCR rule. On March 13, 2019, the D.C. Circuit Court issued an order in the Phase 1, Part 1 litigation granting EPA's motion to remand the rule without vacatur. To date, EPA has finalized two notice-and-comment rulemakings to implement the court's decision on remand. The "Part A" rule, which was promulgated on August 28, 2020, establishes an April 11, 2021 deadline to cease placement of CCR and non-CCR waste streams into unlined ash basins and initiate closure, and the "Part B" rule, which was promulgated on November 12, 2020, establishes procedures to allow facilities to request approval to operate an existing CCR surface impoundment with an alternate liner. A future rulemaking is expected to address legacy impoundments. Duke Energy does not expect these rulemakings to have a material impact in light of its progress in closing CCR units across the enterprise.

In addition to the requirements of the federal CCR rule, CCR landfills and surface impoundments will continue to be regulated by the states. Cost recovery for future expenditures will be pursued through the normal ratemaking process with federal and state utility commissions and via wholesale contracts, which permit recovery of necessary and prudently incurred costs associated with Duke Energy's regulated operations. For more information, see Notes 3 and 9 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

Coal Ash Management Act of 2014

AROs recorded on the Duke Energy Carolinas and Duke Energy Progress Consolidated Balance Sheets at December 31, 2020, and December 31, 2019, include the legal obligation for closure of coal ash basins and the disposal of related ash as a result of the Coal Ash Act, the EPA CCR rule and other agreements. The Coal Ash Act includes a variance procedure for compliance deadlines and other issues surrounding the management of CCR and CCR surface impoundments and prohibits cost recovery in customer rates for unlawful discharge of ash impoundment waters occurring after January 1, 2014. The Coal Ash Act leaves the decision on cost recovery determinations related to closure of ash impoundments to the normal ratemaking processes before utility regulatory commissions.

Consistent with the requirements of the Coal Ash Act, Duke Energy previously submitted comprehensive site assessments and groundwater corrective plans to NCDEQ. In addition, on December 31, 2019, Duke Energy submitted updated groundwater corrective action plans and site-specific coal ash impoundment closure plans to NCDEQ.

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

Following NCDEQ's April 1 Order, Duke Energy estimated the incremental undiscounted cost to close the nine remaining impoundments by excavation would be approximately $4 billion to $5 billion, potentially increasing the total estimated costs to permanently close all ash basins in North Carolina and South Carolina to $9.5 billion to $10.5 billion. The settlement lowers the estimated total undiscounted cost to close the nine remaining basins by excavation by approximately $1.5 billion as compared to Duke Energy's original estimate that followed the order. As a result, the estimated total cost to permanently close all ash basins in North Carolina and South Carolina is approximately $8 billion to $9 billion of which approximately $2.8 billion has been spent through 2020. The majority of the remaining spend is expected to occur over the next 15 to 20 years.

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

For further information on ash basins and recovery, see Notes 3 and 9 to the Consolidated Financial Statements, "Regulatory Matters" and "Asset Retirement Obligations," respectively.

Other Environmental Regulations

The Duke Energy Registrants are also subject to various federal, state and local laws regarding air and water quality, hazardous and solid waste disposal and other environmental matters, including the following:

- CWA
- Steam Effluent Limitation Guidelines
- Cross-State Air Pollution Rule

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

Section 126 Petitions

On November 16, 2016, the state of Maryland filed a petition with EPA under Section 126 of the Clean Air Act alleging that 19 power plants, including two plants (three units) that Duke Energy Registrants own and operate, contribute to violations of EPA's National Ambient Air Quality Standards (NAAQS) for ozone in the state of Maryland. On March 12, 2018, the state of New York filed a petition with EPA, also under Section 126 of the Clean Air Act, alleging that over 60 power plants, including five that Duke Energy Registrants own and operate, contribute to violations of EPA's ozone NAAQS in the state of New York. Both Maryland and New York sought EPA orders requiring the states in which the named power plants operate impose more stringent nitrogen oxide emission limitations on the plants. On October 5, 2018, EPA denied the Maryland petition. That same day, Maryland appealed EPA's denial. On October 18, 2019, EPA denied the New York petition, and New York appealed that decision on October 29, 2019. On May 19, 2020, the U.S. Court of Appeals for the D.C. Circuit issued its decision, finding, with one exception, that EPA reasonably denied the Maryland petition. The court remanded one issue to EPA regarding target sources lacking catalytic controls. All of the Duke Energy units targeted have selective catalytic reduction, so the decision is favorable for these units.

A different panel of the same court heard oral argument in New York's appeal of EPA's denial of its Section 126 Petition on May 7, 2020, and on July 14, 2020, the panel issued its decision remanding the Petition to EPA for further review. The Duke Energy Registrants cannot predict the outcome of this matter.

North Carolina Clean Energy Plan (NCCEP)

On October 29, 2018, Governor Roy Cooper signed an executive order calling for a 40% reduction in statewide greenhouse gas emissions by 2025. The order tasked the NCDEQ with developing a clean energy plan for North Carolina. In October 2019, the NCDEQ published its plan, which includes the reduction of electric power sector greenhouse gas emissions by 70% below 2005 levels by 2030 and attainment of carbon neutrality by 2050, fostering long-term energy affordability and price stability for North Carolina's residents and businesses by modernizing regulatory and planning processes, and acceleration of clean energy innovation to create economic opportunities for both rural and urban areas. Duke Energy Carolinas and Duke Energy Progress are significant stakeholders in this process. The magnitude and timing of investment in response to the NCCEP will depend on the speed of adoption and consensus developed by other stakeholders on how best to successfully transition to this clean energy future while establishing a regulatory model that incentivizes business decisions that benefit both the utilities and the public. The Duke Energy Registrants cannot predict the outcome of this matter.

Global Climate Change

On September 17, 2019, Duke Energy announced an updated climate strategy with new goals of at least 50% reduction in carbon emissions from electric generation by 2030 and net-zero carbon emissions from electric generation by 2050. On October 9, 2020, Duke Energy announced a new goal to achieve net-zero methane emissions from its natural gas distribution system by 2030. Timelines and initiatives, as well as implementation of new technologies, will vary in each state in which the company operates and will involve collaboration with regulators, customers and other stakeholders.

The Duke Energy Registrants' GHG emissions consist primarily of CO_2 and result primarily from operating a fleet of coal-fired and natural gas-fired power plants. Future levels of CO_2 emissions will be influenced by variables that include economic conditions that affect electricity demand, fuel prices, market prices, compliance with new or existing regulations and the technologies deployed to generate the electricity necessary to meet customer demand.

The Duke Energy Registrants have taken actions that have resulted in a reduction of CO_2 emissions over time. Actions have included the retirement of 51 coal-fired electric generating units with a combined generating capacity of 6,539 MW. Much of that capacity has been replaced with state-of-the-art highly efficient natural gas-fired generation that produces far fewer CO_2 emissions per unit of electricity generated. Duke Energy also has made investments to expand its portfolio of wind and solar projects, increase EE offerings and ensure continued operations of its zero-CO_2 emissions hydropower and nuclear plants. These efforts have diversified its system and significantly reduced CO_2 emissions. Between 2005 and 2020, the Duke Energy Registrants have collectively lowered the CO_2 emissions from their electricity generation by more than 40%, which potentially lowers the exposure to any future mandatory CO_2 emission reduction requirements or carbon tax, whether as a result of federal legislation, EPA regulation, state regulation or other as yet unknown emission reduction requirement. Duke Energy will continue to explore the use of currently available and commercially demonstrated technology to reduce CO_2 emissions, including EE, wind, solar, storage, carbon capture, utilization and sequestration, the use of hydrogen and other low-carbon fuels and advanced nuclear. Duke Energy will adjust to evolving and innovative technologies in a way that balances the reliability and affordability that meet regulatory requirements and customer demands. Under any future scenario involving mandatory CO_2 limitations, the Duke Energy Registrants would plan to seek recovery of their compliance costs through appropriate regulatory mechanisms.

The Duke Energy Registrants recognize that scientists associate severe weather events with increasing levels of GHGs in the atmosphere and forecast the possibility these weather events could have a material impact on future results of operations should they occur more frequently and with greater severity. However, the uncertain nature of potential changes in extreme weather events (such as increased frequency, duration and severity), the long period of time over which any potential changes might take place and the inability to predict potential changes with any degree of accuracy, make estimating with any certainty any potential future financial risk to the Duke Energy Registrants' operations difficult.

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

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

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

State Legislation

In 2017, the North Carolina General Assembly passed House Bill 589, and it was subsequently signed into law by the governor. The law includes, among other things, overall reform of the application of PURPA for new solar projects in the state, a requirement for the utility to procure renewable energy through a competitive bidding process administered by an independent third party and recovery of costs related to the competitive bidding process through a competitive procurement rider. The process used was approved by the NCUC to select projects that would deliver the lowest cost of renewable energy for customers.

In accordance with the provisions of House Bill 589, Duke Energy estimates the total competitive procurement will be approximately 1,185 to 1,385 MW. Duke Energy will own or purchase at least 1,185 MW of energy from renewable energy projects under the North Carolina's CPRE program. Two tranches of the CPRE process have been completed with contracts executed for winning proposals. Five Duke Energy projects, totaling about 190 MW, were selected during the first tranche and none were selected during the second tranche. Two of the Duke Energy winning projects achieved commercial operation in December 2020 and the remaining three will be online by the third quarter 2021. The need for a third tranche of CPRE will be determined prior to November 2021.

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

New Accounting Standards

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

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Management's Discussion and Analysis of Results of Operations and Financial Condition – Quantitative and Qualitative Disclosures About Market Risk."

PART II

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Corporation and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1, 3, and 9 to the financial statements.

Critical Audit Matter Description

The Company is subject to regulation by federal and state utility regulatory agencies (the "Commissions"), which have jurisdiction with respect to the rates of the Company's electric and natural gas distribution companies. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $14 billion recorded as regulatory assets.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Rates charged to customers are determined and approved in regulatory proceedings based on an analysis of the Company's costs to provide utility service and a return on the Company's investment in the utility business. Regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investment and the timing and amount of assets to be recovered by rates. The regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. As discussed in Note 3, regulatory proceedings in recent years in North Carolina and South Carolina have focused on the recoverability of asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders in North Carolina and South Carolina requires significant management judgment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions; to support its assertions on the likelihood of future recovery for deferred costs. As such, auditing these judgments required specialized knowledge of accounting for rate regulation due to its inherent complexities, a high degree of auditor judgment, and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 1947.

DUKE ENERGY CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
(in millions, except per share amounts)	**2020**	**2019**	**2018**
Operating Revenues			
Regulated electric	**$ 21,461**	$22,615	$22,097
Regulated natural gas	**1,642**	1,759	1,773
Nonregulated electric and other	**765**	705	651
Total operating revenues	**23,868**	25,079	24,521
Operating Expenses			
Fuel used in electric generation and purchased power	**6,051**	6,826	6,831
Cost of natural gas	**460**	627	697
Operation, maintenance and other	**5,788**	6,066	6,463
Depreciation and amortization	**4,705**	4,548	4,074
Property and other taxes	**1,337**	1,307	1,280
Impairment charges	**984**	(8)	402
Total operating expenses	**19,325**	19,366	19,747
Gains (Losses) on Sales of Other Assets and Other, net	**10**	(4)	(89)
Operating Income	**4,553**	5,709	4,685
Other Income and Expenses			
Equity in (losses) earnings of unconsolidated affiliates	**(2,005)**	162	83
Other income and expenses, net	**453**	430	399
Total other income and expenses	**(1,552)**	592	482
Interest Expense	**2,162**	2,204	2,094
Income From Continuing Operations Before Income Taxes	**839**	4,097	3,073
Income Tax (Benefit) Expense From Continuing Operations	**(236)**	519	448
Income From Continuing Operations	**1,075**	3,578	2,625
Income (Loss) From Discontinued Operations, net of tax	**7**	(7)	19
Net Income	**1,082**	3,571	2,644
Add: Net Loss Attributable to Noncontrolling Interests	**295**	177	22
Net Income Attributable to Duke Energy Corporation	**1,377**	3,748	2,666
Less: Preferred Dividends	**107**	41	—
Net Income Available to Duke Energy Corporation Common Stockholders	**$ 1,270**	$ 3,707	$ 2,666
Earnings Per Share – Basic and Diluted			
Income from continuing operations available to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ 1.71**	$ 5.07	$ 3.73
Income (Loss) from discontinued operations attributable to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ 0.01**	$ (0.01)	$ 0.03
Net income available to Duke Energy Corporation common stockholders			
Basic and Diluted	**$ 1.72**	$ 5.06	$ 3.76
Weighted average shares outstanding			
Basic	**737**	729	708
Diluted	**738**	729	708

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2020**	2019	2018
Net Income	**$1,082**	$3,571	$2,644
Other Comprehensive (Loss) Income, net of tax[a]			
Pension and OPEB adjustments	**6**	9	(6)
Net unrealized losses on cash flow hedges	**(138)**	(47)	(10)
Reclassification into earnings from cash flow hedges	**11**	6	6
Unrealized gains (losses) on available-for-sale securities	**3**	8	(3)
Other Comprehensive Loss, net of tax	**(118)**	(24)	(13)
Comprehensive Income	**964**	3,547	2,631
Add: Comprehensive Loss Attributable to Noncontrolling Interests	**306**	177	22
Comprehensive Income Attributable to Duke Energy Corporation	**1,270**	3,724	2,653
Less: Preferred Dividends	**107**	41	—
Comprehensive Income Available to Duke Energy Corporation Common Stockholders	**$1,163**	$3,683	$ 2,653

(a) Net of income tax impacts of approximately $35 million for the year ended December 31, 2020. Tax impacts are immaterial for other periods presented.

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 259**	$ 311
Receivables (net of allowance for doubtful accounts of $29 at 2020 and $22 at 2019)	**1,009**	1,066
Receivables of VIEs (net of allowance for doubtful accounts of $117 at 2020 and $54 at 2019)	**2,144**	1,994
Inventory	**3,167**	3,232
Regulatory assets (includes $53 at 2020 and $52 at 2019 related to VIEs)	**1,641**	1,796
Other (includes $296 at 2020 and $242 at 2019 related to VIEs)	**462**	764
Total current assets	**8,682**	9,163
Property, Plant and Equipment		
Cost	**155,580**	147,654
Accumulated depreciation and amortization	**(48,827)**	(45,773)
Generation facilities to be retired, net	**29**	246
Net property, plant and equipment	**106,782**	102,127
Other Noncurrent Assets		
Goodwill	**19,303**	19,303
Regulatory assets (includes $937 at 2020 and $989 at 2019 related to VIEs)	**12,421**	13,222
Nuclear decommissioning trust funds	**9,114**	8,140
Operating lease right-of-use assets, net	**1,524**	1,658
Investments in equity method unconsolidated affiliates	**961**	1,936
Other (includes $81 at 2020 and $110 at 2019 related to VIEs)	**3,601**	3,289
Total other noncurrent assets	**46,924**	47,548
Total Assets	**$162,388**	$158,838

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED BALANCE SHEETS – (Continued)

	December 31,	
(in millions)	2020	2019
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 3,144	$ 3,487
Notes payable and commercial paper	2,873	3,135
Taxes accrued	482	392
Interest accrued	537	565
Current maturities of long-term debt (includes $472 at 2020 and $216 at 2019 related to VIEs)	4,238	3,141
Asset retirement obligations	718	881
Regulatory liabilities	1,377	784
Other	2,936	2,367
Total current liabilities	16,305	14,752
Long-Term Debt (includes $3,535 at 2020 and $3,997 at 2019 related to VIEs)	55,625	54,985
Other Noncurrent Liabilities		
Deferred income taxes	9,244	8,878
Asset retirement obligations	12,286	12,437
Regulatory liabilities	15,029	15,264
Operating lease liabilities	1,340	1,432
Accrued pension and other post-retirement benefit costs	969	934
Investment tax credits	687	624
Other (includes $316 at 2020 and $228 at 2019 related to VIEs)	1,719	1,581
Total other noncurrent liabilities	41,274	41,150
Commitments and Contingencies		
Equity		
Preferred stock, Series A, $0.001 par value, 40 million depositary shares authorized and outstanding at 2020 and 2019	973	973
Preferred stock, Series B, $0.001 par value, 1 million shares authorized and outstanding at 2020 and 2019	989	989
Common stock, $0.001 par value, 2 billion shares authorized; 769 million shares outstanding at 2020 and 733 million shares outstanding at 2019	1	1
Additional paid-in capital	43,767	40,881
Retained earnings	2,471	4,108
Accumulated other comprehensive loss	(237)	(130)
Total Duke Energy Corporation stockholders' equity	47,964	46,822
Noncontrolling interests	1,220	1,129
Total equity	49,184	47,951
Total Liabilities and Equity	$162,388	$158,838

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 1,082**	$ 3,571	$ 2,644
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	**5,486**	5,176	4,696
Equity in losses (earnings) of unconsolidated affiliates	**2,005**	(162)	(83)
Equity component of AFUDC	**(154)**	(139)	(221)
(Gains) Losses on sales of other assets	**(10)**	4	88
Impairment charges	**984**	(8)	402
Deferred income taxes	**54**	806	1,079
Payments for asset retirement obligations	**(610)**	(746)	(533)
Payment for the disposal of other assets	**—**	—	(105)
Provision for rate refunds	**(22)**	60	425
Refund of AMT credit carryforwards	**572**	573	—
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**63**	(48)	22
Receivables	**(56)**	78	(345)
Inventory	**66**	(122)	156
Other current assets	**205**	10	(721)
Increase (decrease) in			
Accounts payable	**(21)**	(164)	479
Taxes accrued	**117**	(224)	23
Other current liabilities	**(65)**	172	270
Other assets	**(398)**	(559)	(1,062)
Other liabilities	**(442)**	(69)	(28)
Net cash provided by operating activities	**8,856**	8,209	7,186
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(9,907)**	(11,122)	(9,389)
Contributions to equity method investments	**(370)**	(324)	(416)
Return of investment capital	**133**	11	137
Purchases of debt and equity securities	**(8,011)**	(3,348)	(3,762)
Proceeds from sales and maturities of debt and equity securities	**7,949**	3,343	3,747
Other	**(398)**	(517)	(377)
Net cash used in investing activities	**(10,604)**	(11,957)	(10,060)

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS – (Continued)

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the:			
Issuance of long-term debt	**$ 6,330**	$ 7,091	$ 5,299
Issuance of preferred stock	**—**	1,962	—
Issuance of common stock	**2,745**	384	1,838
Payments for the redemption of long-term debt	**(4,506)**	(3,476)	(2,906)
Proceeds from the issuance of short-term debt with original maturities greater than 90 days	**3,009**	397	472
Payments for the redemption of short-term debt with original maturities greater than 90 days	**(2,147)**	(479)	(282)
Notes payable and commercial paper	**(1,181)**	(298)	981
Contributions from noncontrolling interests	**426**	843	41
Dividends paid	**(2,812)**	(2,668)	(2,471)
Other	**(133)**	(26)	(12)
Net cash provided by financing activities	**1,731**	3,730	2,960
Net (decrease) increase in cash, cash equivalents, and restricted cash	**(17)**	(18)	86
Cash, cash equivalents, and restricted cash at beginning of period	**573**	591	505
Cash, cash equivalents, and restricted cash at end of period	**$ 556**	$ 573	$ 591
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 2,186**	$ 2,195	$ 2,086
Cash received from income taxes	**(585)**	(651)	(266)
Significant non-cash transactions:			
Accrued capital expenditures	**1,116**	1,356	1,112
Non-cash dividends	**110**	108	107

See Notes to Consolidated Financial Statements

DUKE ENERGY CORPORATION

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

						Duke Energy Corporation Stockholders' Accumulated Other Comprehensive Income (Loss)					
(in millions)	Preferred Stock	Common Stock Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Net Losses on Cash Flow Hedges	Net Unrealized Gains (Losses) on Available-for-Sale Securities	Pension and OPEB Adjustments	Total Duke Energy Corporation Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2017	$ —	700	$ 1	$ 38,792	$ 3,013	$ (10)	$ 12	$ (69)	$ 41,739	$ (2)	$ 41,737
Net income	—	—	—	—	2,666	—	—	—	2,666	(22)	2,644
Other comprehensive loss	—	—	—	—	—	(4)	(3)	(6)	(13)	—	(13)
Common stock issuances, including dividend reinvestment and employee benefits	—	27	—	2,003	—	—	—	—	2,003	—	2,003
Common stock dividends	—	—	—	—	(2,578)	—	—	—	(2,578)	—	(2,578)
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(1)	(1)
Other[(a)]	—	—	—	—	12	—	(12)	—	—	42	42
Balance at December 31, 2018	$ —	727	$ 1	$ 40,795	$ 3,113	$ (14)	$ (3)	$ (75)	$ 43,817	$ 17	$ 43,834
Net income	—	—	—	—	3,707	—	—	—	3,707	(177)	3,530
Other comprehensive (loss) Income	—	—	—	—	—	(41)	8	9	(24)	—	(24)
Preferred stock, Series A, issuances, net of issuance costs[(b)]	973	—	—	—	—	—	—	—	973	—	973
Preferred stock, Series B, issuances, net of issuance costs[(b)]	989	—	—	—	—	—	—	—	989	—	989
Common stock issuances, including dividend reinvestment and employee benefits	—	6	—	552	—	—	—	—	552	—	552
Common stock dividends	—	—	—	—	(2,735)	—	—	—	(2,735)	—	(2,735)
Sale of noncontrolling interest[(c)]	—	—	—	(466)	—	10	—	—	(456)	863	407
Contribution from noncontrolling interest[(f)]	—	—	—	—	—	—	—	—	—	428	428
Distributions to noncontrolling interest in subsidiaries	—	—	—	—	—	—	—	—	—	(4)	(4)
Other[(d)]	—	—	—	—	23	(6)	(2)	(16)	(1)	2	1
Balance at December 31, 2019	$ 1,962	733	$ 1	$ 40,881	$ 4,108	$ (51)	$ 3	$ (82)	$ 46,822	$ 1,129	$ 47,951
Net income	—	—	—	—	**1,270**	—	—	—	**1,270**	**(295)**	**975**
Other comprehensive (loss) income	—	—	—	—	—	**(116)**	**3**	**6**	**(107)**	**(11)**	**(118)**
Common stock issuances, including dividend reinvestment and employee benefits	—	**36**	—	**2,902**	—	—	—	—	**2,902**	—	**2,902**
Common stock dividends	—	—	—	—	**(2,815)**	—	—	—	**(2,815)**	—	**(2,815)**
Contribution from noncontrolling interest, net of transaction costs[(f)]	—	—	—	**(17)**	—	—	—	—	**(17)**	**426**	**409**
Distributions to noncontrolling interests in subsidiaries	—	—	—	—	—	—	—	—	—	**(30)**	**(30)**
Other[(e)]	—	—	—	**1**	**(92)**	—	—	—	**(91)**	**1**	**(90)**
Balance at December 31, 2020	**$ 1,962**	**769**	**$ 1**	**$ 43,767**	**$ 2,471**	**$ (167)**	**$ 6**	**$ (76)**	**$ 47,964**	**$ 1,220**	**$ 49,184**

(a) Amounts in Retained Earnings and AOCI represent a cumulative-effect adjustment due to implementation of a new accounting standard related to Financial Instruments Classification and Measurement. See Note 1 for more information. Amount in Noncontrolling Interests primarily relates to tax equity financing activity in the Commercial Renewables segment.

(b) Duke Energy issued 40 million depositary shares of preferred stock, Series A, in the first quarter of 2019 and 1 million shares of preferred stock, Series B, in the third quarter of 2019.

(c) See Note 1 for additional discussion of the transaction.

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

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

(f) Relates to tax equity financing activity in the Commercial Renewables segment.

See Notes to Consolidated Financial Statements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Carolinas, LLC and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1, 3, and 9 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission and by the South Carolina Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $3.5 billion recorded as regulatory assets.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Rates charged to customers are determined and approved in regulatory proceedings based on an analysis of the Company's costs to provide utility service and a return on the Company's investment in the utility business. Regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investment and the timing and amount of assets to be recovered by rates. The regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. As discussed in Note 3, regulatory proceedings in recent years in North Carolina and South Carolina have focused on the recoverability of asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders in North Carolina and South Carolina requires significant management judgment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions; to support its assertions on the likelihood of future recovery for deferred costs. As such, auditing these judgments required specialized knowledge of accounting for rate regulation due to its inherent complexities, a high degree of auditor judgment, and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 1947.

PART II

DUKE ENERGY CAROLINAS, LLC

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	2020	2019	2018
Operating Revenues	**$ 7,015**	$ 7,395	$ 7,300
Operating Expenses			
Fuel used in electric generation and purchased power	**1,682**	1,804	1,821
Operation, maintenance and other	**1,743**	1,868	2,130
Depreciation and amortization	**1,462**	1,388	1,201
Property and other taxes	**299**	292	295
Impairment charges	**476**	17	192
Total operating expenses	**5,662**	5,369	5,639
Gains (Losses) on Sales of Other Assets and Other, net	**1**	—	(1)
Operating Income	**1,354**	2,026	1,660
Other Income and Expenses, net	**177**	151	153
Interest Expense	**487**	463	439
Income Before Income Taxes	**1,044**	1,714	1,374
Income Tax Expense	**88**	311	303
Net Income	**$ 956**	$ 1,403	$ 1,071
Other Comprehensive Income, net of tax			
Reclassification into earnings from cash flow hedges	—	—	1
Other Comprehensive Income, net of tax	—	—	1
Comprehensive Income	**$ 956**	$ 1,403	$ 1,072

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	**2020**	**2019**
ASSETS		
Current Assets		
Cash and cash equivalents	$ 21	$ 18
Receivables (net of allowance for doubtful accounts of $1 at 2020 and $3 at 2019)	247	324
Receivables of VIEs (net of allowance for doubtful accounts of $22 at 2020 and $7 at 2019)	696	642
Receivables from affiliated companies	124	114
Inventory	1,010	996
Regulatory assets	473	550
Other	20	21
Total current assets	2,591	2,665
Property, Plant and Equipment		
Cost	50,640	48,922
Accumulated depreciation and amortization	(17,453)	(16,525)
Net property, plant and equipment	33,187	32,397
Other Noncurrent Assets		
Regulatory assets	2,996	3,360
Nuclear decommissioning trust funds	4,977	4,359
Operating lease right-of-use assets, net	110	123
Other	1,187	1,149
Total other noncurrent assets	9,270	8,991
Total Assets	$ 45,048	$ 44,053
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 1,000	$ 954
Accounts payable to affiliated companies	199	210
Notes payable to affiliated companies	506	29
Taxes accrued	76	46
Interest accrued	117	115
Current maturities of long-term debt	506	458
Asset retirement obligations	264	206
Regulatory liabilities	473	255
Other	546	611
Total current liabilities	3,687	2,884
Long-Term Debt	11,412	11,142
Long-Term Debt Payable to Affiliated Companies	300	300
Other Noncurrent Liabilities		
Deferred income taxes	3,842	3,921
Asset retirement obligations	5,086	5,528
Regulatory liabilities	6,535	6,423
Operating lease liabilities	97	102
Accrued pension and other post-retirement benefit costs	73	84
Investment tax credits	236	231
Other	626	627
Total other noncurrent liabilities	16,495	16,916
Commitments and Contingencies		
Equity		
Member's equity	13,161	12,818
Accumulated other comprehensive loss	(7)	(7)
Total equity	13,154	12,811
Total Liabilities and Equity	$ 45,048	$ 44,053

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 956**	$ 1,403	$ 1,071
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	**1,731**	1,671	1,487
Equity component of AFUDC	**(62)**	(42)	(73)
(Gains) Losses on sales of other assets	**(1)**	—	1
Impairment charges	**476**	17	192
Deferred income taxes	**(260)**	133	305
Payments for asset retirement obligations	**(162)**	(278)	(230)
Provision for rate refunds	**(5)**	36	182
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**(4)**	(8)	2
Receivables	**52**	(21)	(86)
Receivables from affiliated companies	**(10)**	68	(87)
Inventory	**(14)**	(48)	25
Other current assets	**209**	(73)	(161)
Increase (decrease) in			
Accounts payable	**55**	(50)	168
Accounts payable to affiliated companies	**(11)**	(20)	21
Taxes accrued	**30**	(127)	(65)
Other current liabilities	**(56)**	127	89
Other assets	**(101)**	(42)	(221)
Other liabilities	**(47)**	(37)	(90)
Net cash provided by operating activities	**2,776**	2,709	2,530
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(2,669)**	(2,714)	(2,706)
Purchases of debt and equity securities	**(1,602)**	(1,658)	(1,810)
Proceeds from sales and maturities of debt and equity securities	**1,602**	1,658	1,810
Other	**(164)**	(204)	(147)
Net cash used in investing activities	**(2,833)**	(2,918)	(2,853)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**998**	886	1,983
Payments for the redemption of long-term debt	**(813)**	(6)	(1,205)
Notes payable to affiliated companies	**477**	(410)	335
Distributions to parent	**(600)**	(275)	(750)
Other	**(2)**	(1)	(23)
Net cash provided by financing activities	**60**	194	340
Net increase (decrease) in cash and cash equivalents	**3**	(15)	17
Cash and cash equivalents at beginning of period	**18**	33	16
Cash and cash equivalents at end of period	**$ 21**	$ 18	$ 33
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 481**	$ 433	$ 452
Cash paid for income taxes	**321**	122	89
Significant non-cash transactions:			
Accrued capital expenditures	**365**	347	302

See Notes to Consolidated Financial Statements

DUKE ENERGY CAROLINAS, LLC

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

		Accumulated Other Comprehensive Loss	
(in millions)	Member's Equity	Net Gains (Losses) on Cash Flow Hedges	Total Equity
Balance at December 31, 2017	$11,368	$ (7)	$11,361
Net income	1,071	—	1,071
Other comprehensive income	—	1	1
Distributions to parent	(750)	—	(750)
Balance at December 31, 2018	$11,689	$ (6)	$11,683
Net income	1,403	—	1,403
Distributions to parent	(275)	—	(275)
Other	1	(1)	—
Balance at December 31, 2019	$12,818	$ (7)	$12,811
Net income	**956**	—	**956**
Distributions to parent	**(600)**	—	**(600)**
Other[(a)]	**(13)**	—	**(13)**
Balance at December 31, 2020	**$13,161**	**$ (7)**	**$13,154**

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

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Progress Energy, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1, 3, and 9 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission, South Carolina Public Service Commission and Florida Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $6.5 billion recorded as regulatory assets.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Rates charged to customers are determined and approved in regulatory proceedings based on an analysis of the Company's costs to provide utility service and a return on the Company's investment in the utility business. Regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investment and the timing and amount of assets to be recovered by rates. The regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. As discussed in Note 3, regulatory proceedings in recent years in North Carolina and South Carolina have focused on the recoverability of asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders in North Carolina and South Carolina requires significant management judgment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions; to support its assertions on the likelihood of future recovery for deferred costs. As such, auditing these judgments required specialized knowledge of accounting for rate regulation due to its inherent complexities, a high degree of auditor judgment, and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 1930.

PROGRESS ENERGY, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	2020	2019	2018
Operating Revenues	$10,627	$11,202	$10,728
Operating Expenses			
Fuel used in electric generation and purchased power	3,479	4,024	3,976
Operation, maintenance and other	2,479	2,495	2,613
Depreciation and amortization	1,818	1,845	1,619
Property and other taxes	545	561	529
Impairment charges	495	(24)	87
Total operating expenses	8,816	8,901	8,824
Gains on Sales of Other Assets and Other, net	9	—	24
Operating Income	1,820	2,301	1,928
Other Income and Expenses, net	129	141	165
Interest Expense	790	862	842
Income Before Income Taxes	1,159	1,580	1,251
Income Tax Expense	113	253	218
Net Income	1,046	1,327	1,033
Less: Net Income Attributable to Noncontrolling Interests	1	—	6
Net Income Attributable to Parent	$ 1,045	$ 1,327	$ 1,027

Net Income	$ 1,046	$ 1,327	$ 1,033
Other Comprehensive Income, net of tax			
Pension and OPEB adjustments	(1)	2	5
Net unrealized gain on cash flow hedges	5	5	6
Unrealized (losses) gains on available-for-sale securities	(1)	1	(1)
Other Comprehensive Income, net of tax	3	8	10
Comprehensive Income	1,049	1,335	1,043
Less: Comprehensive Income Attributable to Noncontrolling Interests	1	—	6
Comprehensive Income Attributable to Parent	$ 1,048	$ 1,335	$ 1,037

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	$ 59	$ 48
Receivables (net of allowance for doubtful accounts of $8 at 2020 and $7 at 2019)	228	220
Receivables of VIEs (net of allowance for doubtful accounts of $29 at 2020 and $9 at 2019)	901	830
Receivables from affiliated companies	157	76
Notes receivable from affiliated companies	—	164
Inventory	1,375	1,423
Regulatory assets (includes $53 at 2020 and $52 at 2019 related to VIEs)	758	946
Other (includes $39 at 2020 and 2019 related to VIEs)	109	210
Total current assets	3,587	3,917
Property, Plant and Equipment		
Cost	57,892	55,070
Accumulated depreciation and amortization	(18,368)	(17,159)
Generation facilities to be retired, net	29	246
Net property, plant and equipment	39,553	38,157
Other Noncurrent Assets		
Goodwill	3,655	3,655
Regulatory assets (includes $937 at 2020 and $989 at 2019 related to VIEs)	5,775	6,346
Nuclear decommissioning trust funds	4,137	3,782
Operating lease right-of-use assets, net	690	788
Other	1,227	1,049
Total other noncurrent assets	15,484	15,620
Total Assets	$ 58,624	$ 57,694
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 919	$ 1,104
Accounts payable to affiliated companies	289	310
Notes payable to affiliated companies	2,969	1,821
Taxes accrued	121	46
Interest accrued	202	228
Current maturities of long-term debt (includes $305 at 2020 and $54 at 2019 related to VIEs)	1,426	1,577
Asset retirement obligations	283	485
Regulatory liabilities	640	330
Other	793	902
Total current liabilities	7,642	6,803
Long-Term Debt (includes $1,252 at 2020 and $1,632 at 2019 related to VIEs)	17,688	17,907
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	4,396	4,462
Asset retirement obligations	5,866	5,986
Regulatory liabilities	5,051	5,225
Operating lease liabilities	623	697
Accrued pension and other post-retirement benefit costs	505	488
Other	462	383
Total other noncurrent liabilities	16,903	17,241
Commitments and Contingencies		
Equity		
Common stock, $0.01 par value, 100 shares authorized and outstanding at 2020 and 2019	—	—
Additional paid-in capital	9,143	9,143
Retained earnings	7,109	6,465
Accumulated other comprehensive loss	(15)	(18)
Total Progress Energy, Inc. stockholder's equity	16,237	15,590
Noncontrolling interests	4	3
Total equity	16,241	15,593
Total Liabilities and Equity	$ 58,624	$ 57,694

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 1,046**	$ 1,327	$ 1,033
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion (including amortization of nuclear fuel)	**2,327**	2,207	1,987
Equity component of AFUDC	**(42)**	(66)	(104)
Gains on sales of other assets	**(9)**	—	(24)
Impairment charges	**495**	(24)	87
Deferred income taxes	**(197)**	433	358
Payments for asset retirement obligations	**(384)**	(412)	(230)
Provision for rate refunds	**2**	15	122
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**(9)**	(34)	18
Receivables	**(69)**	47	(207)
Receivables from affiliated companies	**(81)**	81	(137)
Inventory	**49**	62	121
Other current assets	**223**	184	(12)
Increase (decrease) in			
Accounts payable	**(62)**	(4)	217
Accounts payable to affiliated companies	**(21)**	(50)	109
Taxes accrued	**75**	(74)	8
Other current liabilities	**139**	25	129
Other assets	**(128)**	(341)	(896)
Other liabilities	**(177)**	(167)	(35)
Net cash provided by operating activities	**3,177**	3,209	2,544
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(3,488)**	(3,952)	(3,854)
Purchases of debt and equity securities	**(5,998)**	(1,511)	(1,753)
Proceeds from sales and maturities of debt and equity securities	**6,010**	1,504	1,769
Notes receivable from affiliated companies	**164**	(164)	240
Other	**(160)**	(190)	(162)
Net cash used in investing activities	**(3,472)**	(4,313)	(3,760)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**1,791**	2,187	1,833
Payments for the redemption of long-term debt	**(2,157)**	(1,667)	(771)
Notes payable to affiliated companies	**1,148**	586	430
Dividends to parent	**(400)**	—	(250)
Other	**(13)**	12	(1)
Net cash provided by financing activities	**369**	1,118	1,241
Net increase in cash, cash equivalents, and restricted cash	**74**	14	25
Cash, cash equivalents, and restricted cash at beginning of period	**126**	112	87
Cash, cash equivalents, and restricted cash at end of period	**$ 200**	$ 126	$ 112
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 819**	$ 892	$ 798
Cash paid for (received from) income taxes	**149**	(79)	(348)
Significant non-cash transactions:			
Accrued capital expenditures	**363**	447	478

See Notes to Consolidated Financial Statements

PROGRESS ENERGY, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

			Accumulated Other Comprehensive Income (Loss)					
(in millions)	Additional Paid-in Capital	Retained Earnings	Net Gains (Losses) on Cash Flow Hedges	Net Unrealized Gains (Losses) on Available-for-Sale Securities	Pension and OPEB Adjustments	Total Progress Energy, Inc. Stockholder's Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2017	$ 9,143	$ 4,350	$ (18)	$ 5	$ (12)	$ 13,468	$ (3)	$ 13,465
Net income	—	1,027	—	—	—	1,027	6	1,033
Other comprehensive income (loss)	—	—	6	(1)	5	10	—	10
Distributions to noncontrolling interests	—	—	—	—	—	—	(1)	(1)
Dividends to parent	—	(250)	—	—	—	(250)	—	(250)
Other[(a)]	—	4	—	(5)	—	(1)	1	—
Balance at December 31, 2018	$ 9,143	$ 5,131	$ (12)	$ (1)	$ (7)	$ 14,254	$ 3	$ 14,257
Net income	—	1,327	—	—	—	1,327	—	1,327
Other comprehensive income	—	—	5	1	2	8	—	8
Other[(b)]	—	7	(3)	(1)	(2)	1	—	1
Balance at December 31, 2019	$ 9,143	$ 6,465	$ (10)	$ (1)	$ (7)	$ 15,590	$ 3	$ 15,593
Net income	—	**1,045**	—	—	—	**1,045**	**1**	**1,046**
Other comprehensive income (loss)	—	—	**5**	**(1)**	**(1)**	**3**	—	**3**
Dividends to parent	—	**(400)**	—	—	—	**(400)**	—	**(400)**
Other	—	**(1)**	—	—	—	**(1)**	—	**(1)**
Balance at December 31, 2020	**$ 9,143**	**$ 7,109**	**$ (5)**	**$ (2)**	**$ (8)**	**$ 16,237**	**$ 4**	**$16,241**

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

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

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Progress, LLC and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1, 3, and 9 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission and by the South Carolina Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $4.5 billion recorded as regulatory assets.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Rates charged to customers are determined and approved in regulatory proceedings based on an analysis of the Company's costs to provide utility service and a return on the Company's investment in the utility business. Regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investment and the timing and amount of assets to be recovered by rates. The regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. As discussed in Note 3, regulatory proceedings in recent years in North Carolina and South Carolina have focused on the recoverability of asset retirement obligations specific to coal ash. As a result, assessing the potential outcomes of future regulatory orders in North Carolina and South Carolina requires significant management judgment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management, including assumptions regarding the outcome of future decisions by the Commissions; to support its assertions on the likelihood of future recovery for deferred costs. As such, auditing these judgments required specialized knowledge of accounting for rate regulation due to its inherent complexities, a high degree of auditor judgment, and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commissions, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commissions, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained an analysis from management and letters from internal legal counsel for asset retirement obligations specific to coal ash costs, regarding probability of recovery for deferred costs not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 1930.

DUKE ENERGY PROGRESS, LLC

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	2020	2019	2018
Operating Revenues	$ 5,422	$ 5,957	$ 5,699
Operating Expenses			
Fuel used in electric generation and purchased power	1,743	2,012	1,892
Operation, maintenance and other	1,332	1,446	1,578
Depreciation and amortization	1,116	1,143	991
Property and other taxes	167	176	155
Impairment charges	499	12	33
Total operating expenses	4,857	4,789	4,649
Gains on Sales of Other Assets and Other, net	8	—	9
Operating Income	573	1,168	1,059
Other Income and Expenses, net	75	100	87
Interest Expense	269	306	319
Income Before Income Taxes	379	962	827
Income Tax (Benefit) Expense	(36)	157	160
Net Income and Comprehensive Income	$ 415	$ 805	$ 667

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	$ 39	$ 22
Receivables (net of allowance for doubtful accounts of $4 at 2020 and $3 at 2019)	132	123
Receivables of VIEs (net of allowance for doubtful accounts of $19 at 2020 and $5 at 2019)	500	489
Receivables from affiliated companies	50	52
Inventory	911	934
Regulatory assets	492	526
Other	60	60
Total current assets	2,184	2,206
Property, Plant and Equipment		
Cost	35,759	34,603
Accumulated depreciation and amortization	(12,801)	(11,915)
Generation facilities to be retired, net	29	246
Net property, plant and equipment	22,987	22,934
Other Noncurrent Assets		
Regulatory assets	3,976	4,152
Nuclear decommissioning trust funds	3,500	3,047
Operating lease right-of-use assets, net	346	387
Other	740	651
Total other noncurrent assets	8,562	8,237
Total Assets	$33,733	$33,377
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 454	$ 629
Accounts payable to affiliated companies	215	203
Notes payable to affiliated companies	295	66
Taxes accrued	85	17
Interest accrued	99	110
Current maturities of long-term debt	603	1,006
Asset retirement obligations	283	485
Regulatory liabilities	530	236
Other	411	478
Total current liabilities	2,975	3,230
Long-Term Debt	8,505	7,902
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	2,298	2,388
Asset retirement obligations	5,352	5,408
Regulatory liabilities	4,394	4,232
Operating lease liabilities	323	354
Accrued pension and other post-retirement benefit costs	242	238
Investment tax credits	132	137
Other	102	92
Total other noncurrent liabilities	12,843	12,849
Commitments and Contingencies		
Equity		
Member's Equity	9,260	9,246
Total Liabilities and Equity	$33,733	$33,377

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 415**	$ 805	$ 667
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of nuclear fuel)	**1,299**	1,329	1,183
Equity component of AFUDC	**(29)**	(60)	(57)
Gains on sales of other assets	**(8)**	—	(9)
Impairment charges	**499**	12	33
Deferred income taxes	**(234)**	197	236
Payments for asset retirement obligations	**(304)**	(390)	(195)
Provisions for rate refunds	**2**	12	122
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	**1**	(6)	5
Receivables	**(4)**	21	(107)
Receivables from affiliated companies	**2**	(29)	(20)
Inventory	**23**	20	63
Other current assets	**98**	101	(201)
Increase (decrease) in			
Accounts payable	**(127)**	32	219
Accounts payable to affiliated companies	**12**	(75)	99
Taxes accrued	**68**	(46)	(11)
Other current liabilities	**157**	68	46
Other assets	**(207)**	(205)	(465)
Other liabilities	**3**	37	20
Net cash provided by operating activities	**1,666**	1,823	1,628
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(1,581)**	(2,108)	(2,220)
Purchases of debt and equity securities	**(1,555)**	(842)	(1,236)
Proceeds from sales and maturities of debt and equity securities	**1,516**	810	1,206
Other	**(57)**	(119)	(95)
Net cash used in investing activities	**(1,677)**	(2,259)	(2,345)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**1,296**	1,269	845
Payments for the redemption of long-term debt	**(1,085)**	(605)	(3)
Notes payable to affiliated companies	**229**	(228)	54
Distributions to parent	**(400)**	—	(175)
Other	**(12)**	(1)	(1)
Net cash provided by financing activities	**28**	435	720
Net increase (decrease) in cash and cash equivalents	**17**	(1)	3
Cash and cash equivalents at beginning of period	**22**	23	20
Cash and cash equivalents at end of period	**$ 39**	$ 22	$ 23
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 301**	$ 331	$ 303
Cash paid for (received from) income taxes	**123**	(30)	(112)
Significant non-cash transactions:			
Accrued capital expenditures	**149**	175	220

See Notes to Consolidated Financial Statements

DUKE ENERGY PROGRESS, LLC

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity
Balance at December 31, 2017	$ 7,949
Net income	667
Distribution to parent	(175)
Balance at December 31, 2018	$ 8,441
Net income	805
Balance at December 31, 2019	$ 9,246
Net income	**415**
Distribution to parent	**(400)**
Other	**(1)**
Balance at December 31, 2020	**$ 9,260**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Florida, LLC and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1 and 3 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Florida Public Service Commission (the "Commission"), which has jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $2.1 billion recorded as regulatory assets.

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

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the Commission, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commission's treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commission, including the settlement agreement filed with the Commission subsequent to December 31, 2020, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 2001

DUKE ENERGY FLORIDA, LLC

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
Operating Revenues	**$ 5,188**	$ 5,231	$ 5,021
Operating Expenses			
Fuel used in electric generation and purchased power	**1,737**	2,012	2,085
Operation, maintenance and other	**1,131**	1,034	1,025
Depreciation and amortization	**702**	702	628
Property and other taxes	**381**	392	374
Impairment charges	**(4)**	(36)	54
Total operating expenses	**3,947**	4,104	4,166
Gains on Sales of Other Assets and Other, net	**1**	—	1
Operating Income	**1,242**	1,127	856
Other Income and Expenses, net	**53**	48	86
Interest Expense	**326**	328	287
Income Before Income Taxes	**969**	847	655
Income Tax Expense	**198**	155	101
Net Income	**$ 771**	$ 692	$ 554
Other Comprehensive Income (Loss), net of tax			
Unrealized (losses) gains on available-for-sale securities	**(1)**	1	(1)
Other Comprehensive (Loss) Income, net of tax	**(1)**	1	(1)
Comprehensive Income	**$ 770**	$ 693	$ 553

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	$ 11	$ 17
Receivables (net of allowance for doubtful accounts of $4 at 2020 and $3 at 2019)	94	96
Receivables of VIEs (net of allowance for doubtful accounts of $10 at 2020 and $4 at 2019)	401	341
Receivables from affiliated companies	3	—
Notes receivable from affiliated companies	—	173
Inventory	464	489
Regulatory assets (includes $53 at 2020 and $52 at 2019 related to VIEs)	265	419
Other (includes $39 at 2020 and 2019 related to VIEs)	41	58
Total current assets	1,279	1,593
Property, Plant and Equipment		
Cost	22,123	20,457
Accumulated depreciation and amortization	(5,560)	(5,236)
Net property, plant and equipment	16,563	15,221
Other Noncurrent Assets		
Regulatory assets (includes $937 at 2020 and $989 at 2019 related to VIEs)	1,799	2,194
Nuclear decommissioning trust funds	637	734
Operating lease right-of-use assets, net	344	401
Other	335	311
Total other noncurrent assets	3,115	3,640
Total Assets	$ 20,957	$ 20,454
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 465	$ 474
Accounts payable to affiliated companies	85	131
Notes payable to affiliated companies	196	—
Taxes accrued	82	43
Interest accrued	69	75
Current maturities of long-term debt (includes $305 at 2020 and $54 at 2019 related to VIEs)	823	571
Regulatory liabilities	110	94
Other	374	415
Total current liabilities	2,204	1,803
Long-Term Debt (includes $1,002 at 2020 and $1,307 at 2019 related to VIEs)	7,092	7,416
Other Noncurrent Liabilities		
Deferred income taxes	2,191	2,179
Asset retirement obligations	514	578
Regulatory liabilities	658	993
Operating lease liabilities	300	343
Accrued pension and other post-retirement benefit costs	231	218
Other	209	136
Total other noncurrent liabilities	4,103	4,447
Commitments and Contingencies		
Equity		
Member's equity	7,560	6,789
Accumulated other comprehensive loss	(2)	(1)
Total equity	7,558	6,788
Total Liabilities and Equity	$ 20,957	$ 20,454

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$ 771	$ 692	$ 554
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	1,019	869	793
Equity component of AFUDC	(12)	(6)	(47)
Gains on sales of other assets	(1)	—	(1)
Impairment charges	(4)	(36)	54
Deferred income taxes	27	180	159
Payments for asset retirement obligations	(80)	(22)	(35)
(Increase) decrease in			
Net realized and unrealized mark-to-market and hedging transactions	(14)	(33)	7
Receivables	(64)	26	(100)
Receivables from affiliated companies	(3)	17	(26)
Inventory	26	42	58
Other current assets	40	156	59
Increase (decrease) in			
Accounts payable	66	(36)	(1)
Accounts payable to affiliated companies	(46)	40	17
Taxes accrued	39	(31)	40
Other current liabilities	(7)	(36)	82
Other assets	85	(131)	(429)
Other liabilities	(181)	(213)	(75)
Net cash provided by operating activities	1,661	1,478	1,109
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(1,907)	(1,844)	(1,634)
Purchases of debt and equity securities	(4,443)	(669)	(517)
Proceeds from sales and maturities of debt and equity securities	4,495	695	563
Notes receivable from affiliated companies	173	(173)	313
Other	(103)	(67)	(65)
Net cash used in investing activities	(1,785)	(2,058)	(1,340)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	495	918	988
Payments for the redemption of long-term debt	(572)	(262)	(769)
Notes payable to affiliated companies	196	(108)	108
Distribution to parent	—	—	(75)
Other	(1)	13	1
Net cash provided by financing activities	118	561	253
Net (decrease) increase in cash, cash equivalents, and restricted cash	(6)	(19)	22
Cash, cash equivalents, and restricted cash at beginning of period	56	75	53
Cash, cash equivalents, and restricted cash at end of period	$ 50	$ 56	$ 75
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	$ 321	$ 332	$ 270
Cash paid for (received from) income taxes	138	1	(120)
Significant non-cash transactions:			
Accrued capital expenditures	214	272	258

See Notes to Consolidated Financial Statements

DUKE ENERGY FLORIDA, LLC

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gains (Losses) on Available-for-Sale Securities	Total Equity
Balance at December 31, 2017	$ 5,614	$ 4	$ 5,618
Net income	554	—	554
Other comprehensive loss	—	(1)	(1)
Distribution to parent	(75)	—	(75)
Other[(a)]	4	(5)	(1)
Balance at December 31, 2018	$ 6,097	$ (2)	$ 6,095
Net income	692	—	692
Other comprehensive income	—	1	1
Balance at December 31, 2019	$ 6,789	$ (1)	$ 6,788
Net income	**771**	—	**771**
Other comprehensive loss	—	**(1)**	**(1)**
Balance at December 31, 2020	**$ 7,560**	**$ (2)**	**$ 7,558**

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

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Ohio, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1 and 3 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Public Utilities Commission of Ohio and by the Kentucky Public Service Commission (collectively the "Commissions"), which have jurisdiction with respect to the electric and gas rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $650 million recorded as regulatory assets.

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

How the Critical Audit Matter Was Addressed in the Audit

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

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

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 2002.

DUKE ENERGY OHIO, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
Operating Revenues			
Regulated electric	**$ 1,405**	$ 1,456	$ 1,450
Regulated natural gas	**453**	484	506
Nonregulated electric and other	**—**	—	1
Total operating revenues	**1,858**	1,940	1,957
Operating Expenses			
Fuel used in electric generation and purchased power – regulated	**339**	388	412
Cost of natural gas	**73**	95	113
Operation, maintenance and other	**463**	520	480
Depreciation and amortization	**278**	265	268
Property and other taxes	**324**	308	290
Total operating expenses	**1,477**	1,576	1,563
Losses on Sales of Other Assets and Other, net	**—**	—	(106)
Operating Income	**381**	364	288
Other Income and Expenses, net	**16**	24	23
Interest Expense	**102**	109	92
Income From Continuing Operations Before Income Taxes	**295**	279	219
Income Tax Expense From Continuing Operations	**43**	40	43
Income From Continuing Operations	**252**	239	176
Loss From Discontinued Operations, net of tax	**—**	(1)	—
Net Income and Comprehensive Income	**$ 252**	$ 238	$ 176

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	$ 14	$ 17
Receivables (net of allowance for doubtful accounts of $4 at 2020 and $4 at 2019)	98	84
Receivables from affiliated companies	102	92
Inventory	110	135
Regulatory assets	39	49
Other	31	21
Total current assets	394	398
Property, Plant and Equipment		
Cost	11,022	10,241
Accumulated depreciation and amortization	(3,013)	(2,843)
Net property, plant and equipment	8,009	7,398
Other Noncurrent Assets		
Goodwill	920	920
Regulatory assets	610	549
Operating lease right-of-use assets, net	20	21
Other	72	52
Total other noncurrent assets	1,622	1,542
Total Assets	$ 10,025	$ 9,338
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 279	$ 288
Accounts payable to affiliated companies	68	68
Notes payable to affiliated companies	169	312
Taxes accrued	247	219
Interest accrued	31	30
Current maturities of long-term debt	50	—
Asset retirement obligations	3	1
Regulatory liabilities	65	64
Other	70	75
Total current liabilities	982	1,057
Long-Term Debt	3,014	2,594
Long-Term Debt Payable to Affiliated Companies	25	25
Other Noncurrent Liabilities		
Deferred income taxes	981	922
Asset retirement obligations	108	79
Regulatory liabilities	748	763
Operating lease liabilities	20	21
Accrued pension and other post-retirement benefit costs	113	100
Other	99	94
Total other noncurrent liabilities	2,069	1,979
Commitments and Contingencies		
Equity		
Common stock, $8.50 par value, 120 million shares authorized; 90 million shares outstanding at 2020 and 2019	762	762
Additional paid-in capital	2,776	2,776
Retained earnings	397	145
Total equity	3,935	3,683
Total Liabilities and Equity	$ 10,025	$ 9,338

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 252**	$ 238	$ 176
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and accretion	**283**	269	271
Equity component of AFUDC	**(7)**	(13)	(11)
Losses on sales of other assets	**—**	—	106
Deferred income taxes	**31**	81	25
Payments for asset retirement obligations	**(2)**	(8)	(3)
Provision for rate refunds	**14**	7	24
(Increase) decrease in			
Receivables	**(13)**	20	(33)
Receivables from affiliated companies	**9**	22	19
Inventory	**25**	(9)	7
Other current assets	**(18)**	(5)	16
Increase (decrease) in			
Accounts payable	**2**	(17)	(19)
Accounts payable to affiliated companies	**—**	(10)	16
Taxes accrued	**30**	17	12
Other current liabilities	**3**	1	14
Other assets	**(32)**	(26)	(24)
Other liabilities	**(2)**	(41)	(26)
Net cash provided by operating activities	**575**	526	570
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(834)**	(952)	(827)
Notes receivable from affiliated companies	**(19)**	—	14
Other	**(48)**	(68)	(89)
Net cash used in investing activities	**(901)**	(1,020)	(902)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**467**	1,003	99
Payments for the redemption of long-term debt	**—**	(551)	(3)
Notes payable to affiliated companies	**(144)**	38	245
Net cash provided by financing activities	**323**	490	341
Net (decrease) increase in cash and cash equivalents	**(3)**	(4)	9
Cash and cash equivalents at beginning of period	**17**	21	12
Cash and cash equivalents at end of period	**$ 14**	$ 17	$ 21
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 97**	$ 97	$ 87
Cash received from income taxes	**—**	(37)	(6)
Significant non-cash transactions:			
Accrued capital expenditures	**104**	109	95
Non-cash equity contribution from parent	**—**	—	106

See Notes to Consolidated Financial Statements

DUKE ENERGY OHIO, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Common Stock	Additional Paid-in Capital	Retained Earnings (Deficit)	Total Equity
Balance at December 31, 2017	$ 762	$ 2,670	$ (269)	$ 3,163
Net income	—	—	176	176
Contribution from parent	—	106	—	106
Balance at December 31, 2018	$ 762	$ 2,776	$ (93)	$ 3,445
Net income	—	—	238	238
Balance at December 31, 2019	$ 762	$ 2,776	$ 145	$ 3,683
Net income	—	—	**252**	**252**
Balance at December 31, 2020	**$ 762**	**$ 2,776**	**$ 397**	**$ 3,935**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Duke Energy Indiana, LLC and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matters

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1 and 3 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the Indiana Utility Regulatory Commission (the "Commission"), which has jurisdiction with respect to the electric rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $1.3 billion recorded as regulatory assets.

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

How the Critical Audit Matter Was Addressed in the Audit

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

- We tested the effectiveness of management's controls over the evaluation of the likelihood of the recovery in future rates of regulatory assets and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.

- We read relevant regulatory orders issued by the Commission, regulatory statutes, interpretations, procedural memorandums, filings made by interveners, and other publicly available information to assess the likelihood of recovery in future rates based on precedents of the Commission's treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset balances for completeness.
- For regulatory matters in process, we inspected the Company's and intervenors' filings with the Commission, that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We evaluated the reasonableness of management's judgments regarding the recoverability of regulatory asset balances by performing the following:
  - We inquired of management regarding changes in regulatory orders and regulatory asset balances during the year.
  - We evaluated the reasonableness of such changes based on our knowledge of commission-approved amortization, expected incurred costs, and recently approved regulatory orders, as applicable.
  - We utilized trend analyses to evaluate the historical consistency of regulatory asset balances.
  - We compared the recorded regulatory asset balance to an independently developed expectation of the corresponding balance.
- We obtained representation from management asserting that regulatory assets recorded on the financial statements are probable of recovery.

Duke Energy Indiana Coal Ash Asset Retirement Obligations – Refer to Notes 3, 4, and 9 to the financial statements

Critical Audit Matter Description

Duke Energy Indiana has asset retirement obligations associated with coal ash impoundments at operating and retired coal generation facilities. These legal obligations are the result of Indiana state and federal regulations. There is significant judgment in determining the assumptions used in estimating the closure costs for each site since Duke Energy Indiana does not have approved closure plans for certain sites. Potential changes to the projected closure costs for each site as well as probability weightings for the cash flows associated with the different potential closure methods ("probability weightings") creates estimation uncertainty. The liability for coal ash asset retirement obligations at Duke Energy Indiana was $1,140 million at December 31, 2020.

We identified the asset retirement obligations associated with coal ash impoundments at Duke Energy Indiana as a critical audit matter because of the significant management estimates and assumptions, including projected closure costs as well as the different potential closure methods. The audit procedures to evaluate the reasonableness of management's estimates and assumptions related to potential changes to the projected closure costs for each site as well as probability weightings for the cash flows associated with the different potential closure methods required a high degree of auditor judgment and an increased extent of effort, including the need to involve our environmental specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the underlying estimated closure costs for coal ash asset retirement obligations at Duke Energy Indiana included the following, among others:

- We tested the effectiveness of controls over management's coal ash asset retirement obligation estimate, including those over management's determination of the estimated closure costs and probability weightings.
- We evaluated management's ability to accurately estimate future closure costs by comparing actual closure costs to management's historical estimates.
- We tested the mathematical accuracy of management's coal ash asset retirement obligation calculations, including the application of probability weightings.
- We made inquiries of internal and external legal counsel regarding the status of the legal matters associated with the probability weightings.
- We inspected the opinions from internal and external legal counsel supporting the probability weightings.
- We inspected the Company's filings with and orders from the Indiana Department of Environmental Management, for evidence that might contradict management's assertions regarding the estimated closure costs and probability weightings.
- With the assistance of our environmental specialists, we evaluated the reasonableness of management's estimated closure costs by comparing the costs to actual costs incurred at comparable coal ash impoundments, underlying contracts, and publicly available industry cost data, as applicable.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 2002.

DUKE ENERGY INDIANA, LLC

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
Operating Revenues	**$ 2,795**	$ 3,004	$ 3,059
Operating Expenses			
Fuel used in electric generation and purchased power	**767**	935	1,000
Operation, maintenance and other	**762**	790	788
Depreciation and amortization	**569**	525	520
Property and other taxes	**81**	69	78
Impairment charges	**—**	—	30
Total operating expenses	**2,179**	2,319	2,416
Operating Income	**616**	685	643
Other Income and Expenses, net	**37**	41	45
Interest Expense	**161**	156	167
Income Before Income Taxes	**492**	570	521
Income Tax Expense	**84**	134	128
Net Income and Comprehensive Income	**$ 408**	$ 436	$ 393

See Notes to Consolidated Financial Statements

PART II

DUKE ENERGY INDIANA, LLC

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Cash and cash equivalents	$ 7	$ 25
Receivables (net of allowance for doubtful accounts of $3 at 2020 and $3 at 2019)	55	60
Receivables from affiliated companies	112	79
Inventory	473	517
Regulatory assets	125	90
Other	37	60
Total current assets	809	831
Property, Plant and Equipment		
Cost	17,382	16,305
Accumulated depreciation and amortization	(5,661)	(5,233)
Net property, plant and equipment	11,721	11,072
Other Noncurrent Assets		
Regulatory assets	1,203	1,082
Operating lease right-of-use assets, net	55	57
Other	253	234
Total other noncurrent assets	1,511	1,373
Total Assets	$ 14,041	$ 13,276
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 188	$ 201
Accounts payable to affiliated companies	88	87
Notes payable to affiliated companies	131	30
Taxes accrued	62	49
Interest accrued	51	58
Current maturities of long-term debt	70	503
Asset retirement obligations	168	189
Regulatory liabilities	111	55
Other	83	112
Total current liabilities	952	1,284
Long-Term Debt	3,871	3,404
Long-Term Debt Payable to Affiliated Companies	150	150
Other Noncurrent Liabilities		
Deferred income taxes	1,228	1,150
Asset retirement obligations	1,008	643
Regulatory liabilities	1,627	1,685
Operating lease liabilities	53	55
Accrued pension and other post-retirement benefit costs	171	148
Investment tax credits	168	164
Other	30	18
Total other noncurrent liabilities	4,285	3,863
Commitments and Contingencies		
Equity		
Member's Equity	4,783	4,575
Total Liabilities and Equity	$ 14,041	$ 13,276

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 408**	$ 436	$ 393
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization, and accretion	**572**	531	524
Equity component of AFUDC	**(23)**	(18)	(32)
Impairment charges	**—**	—	30
Deferred income taxes	**29**	156	95
Payments for asset retirement obligations	**(63)**	(48)	(69)
Provision for rate refunds	**—**	—	53
(Increase) decrease in			
Receivables	**8**	(8)	7
Receivables from affiliated companies	**—**	41	3
Inventory	**44**	(95)	28
Other current assets	**(3)**	76	(25)
Increase (decrease) in			
Accounts payable	**(12)**	(10)	37
Accounts payable to affiliated companies	**1**	4	5
Taxes accrued	**13**	(25)	(52)
Other current liabilities	**6**	15	14
Other assets	**(68)**	(74)	26
Other liabilities	**26**	16	(31)
Net cash provided by operating activities	**938**	997	1,006
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(888)**	(876)	(832)
Purchases of debt and equity securities	**(37)**	(26)	(48)
Proceeds from sales and maturities of debt and equity securities	**22**	20	44
Notes receivable from affiliated companies	**(33)**	—	—
Other	**48**	(49)	18
Net cash used in investing activities	**(888)**	(931)	(818)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**544**	485	—
Payments for the redemption of long-term debt	**(513)**	(213)	(3)
Notes payable to affiliated companies	**101**	(137)	6
Distributions to parent	**(200)**	(200)	(175)
Other	**—**	—	(1)
Net cash used in financing activities	**(68)**	(65)	(173)
Net (decrease) increase in cash and cash equivalents	**(18)**	1	15
Cash and cash equivalents at beginning of period	**25**	24	9
Cash and cash equivalents at end of period	**$ 7**	$ 25	$ 24
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 164**	$ 150	$ 162
Cash paid for (received from) income taxes	**36**	(6)	75
Significant non-cash transactions:			
Accrued capital expenditures	**101**	102	88

See Notes to Consolidated Financial Statements

DUKE ENERGY INDIANA, LLC

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Member's Equity
Balance at December 31, 2017	$ 4,121
Net income	393
Distributions to parent	(175)
Balance at December 31, 2018	$ 4,339
Net income	436
Distributions to parent	(200)
Balance at December 31, 2019	$ 4,575
Net income	**408**
Distributions to parent	**(200)**
Balance at December 31, 2020	**$ 4,783**

See Notes to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Piedmont Natural Gas Company, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations and comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

Critical Audit Matter

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

Regulatory Matters — Impact of Rate Regulation on the Financial Statements — Refer to Notes 1 and 3 to the financial statements.

Critical Audit Matter Description

The Company is subject to rate regulation by the North Carolina Utilities Commission, the Public Service Commission of South Carolina, and the Tennessee Public Utility Commission (collectively the "Commissions"), which have jurisdiction with respect to the gas rates of the Company. Management has determined it meets the criteria for the application of regulated operations accounting in preparing its financial statements under accounting principles generally accepted in the United States of America. Significant judgment can be required to determine if otherwise recognizable incurred costs qualify to be presented as a regulatory asset and deferred because such costs are probable of future recovery in customer rates. As of December 31, 2020, the Company has approximately $450 million recorded as regulatory assets.

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

How the Critical Audit Matter Was Addressed in the Audit

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

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

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021
We have served as the Company's auditor since 1951.

PIEDMONT NATURAL GAS COMPANY, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

	Years Ended December 31,		
(in millions)	**2020**	**2019**	**2018**
Operating Revenues			
Regulated natural gas	**$ 1,286**	$ 1,369	$ 1,365
Nonregulated natural gas and other	**11**	12	10
Total operating revenues	**1,297**	1,381	1,375
Operating Expenses			
Cost of natural gas	**386**	532	584
Operation, maintenance and other	**322**	328	357
Depreciation and amortization	**180**	172	159
Property and other taxes	**53**	45	49
Impairment charges	**7**	—	—
Total operating expenses	**948**	1,077	1,149
Operating Income	**349**	304	226
Equity in earnings of unconsolidated affiliates	**9**	8	7
Other income and expense, net	**51**	20	14
Total other income and expenses	**60**	28	21
Interest Expense	**118**	87	81
Income Before Income Taxes	**291**	245	166
Income Tax Expense	**18**	43	37
Net Income and Comprehensive Income	**$ 273**	$ 202	$ 129

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
(in millions)	2020	2019
ASSETS		
Current Assets		
Receivables (net of allowance for doubtful accounts of $12 at 2020 and $6 at 2019)	$ 250	$ 241
Receivables from affiliated companies	10	10
Inventory	68	72
Regulatory assets	153	73
Other	20	28
Total current assets	501	424
Property, Plant and Equipment		
Cost	9,134	8,446
Accumulated depreciation and amortization	(1,749)	(1,681)
Net property, plant and equipment	7,385	6,765
Other Noncurrent Assets		
Goodwill	49	49
Regulatory assets	302	290
Operating lease right-of-use assets, net	20	24
Investments in equity method unconsolidated affiliates	88	83
Other	270	121
Total other noncurrent assets	729	567
Total Assets	$ 8,615	$ 7,756
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 230	$ 215
Accounts payable to affiliated companies	79	3
Notes payable to affiliated companies	530	476
Taxes accrued	23	24
Interest accrued	34	33
Current maturities of long-term debt	160	—
Regulatory liabilities	88	81
Other	69	67
Total current liabilities	1,213	899
Long-Term Debt	2,620	2,384
Other Noncurrent Liabilities		
Deferred income taxes	821	708
Asset retirement obligations	20	17
Regulatory liabilities	1,044	1,131
Operating lease liabilities	19	23
Accrued pension and other post-retirement benefit costs	8	3
Other	155	148
Total other noncurrent liabilities	2,067	2,030
Commitments and Contingencies		
Equity		
Common stock, 0 par value: 100 shares authorized and outstanding at 2020 and 2019	1,310	1,310
Retained earnings	1,405	1,133
Total equity	2,715	2,443
Total Liabilities and Equity	$ 8,615	$ 7,756

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
(in millions)	2020	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	**$ 273**	$ 202	$ 129
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	**182**	174	161
Equity component of AFUDC	**(19)**	—	—
Impairment charges	**7**	—	—
Deferred income taxes	**53**	136	(31)
Equity in (earnings) losses from unconsolidated affiliates	**(9)**	(8)	(7)
Provision for rate refunds	**(33)**	2	43
(Increase) decrease in			
Receivables	**10**	28	7
Receivables from affiliated companies	**—**	12	(15)
Inventory	**3**	(2)	(4)
Other current assets	**(66)**	(25)	71
Increase (decrease) in			
Accounts payable	**16**	(7)	15
Accounts payable to affiliated companies	**76**	(35)	25
Taxes accrued	**3**	(60)	65
Other current liabilities	**(11)**	1	21
Other assets	**(11)**	1	3
Other liabilities	**7**	(10)	(5)
Net cash provided by operating activities	**481**	409	478
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	**(901)**	(1,053)	(721)
Contributions to equity method investments	**—**	(16)	—
Other	**(28)**	(14)	(10)
Net cash used in investing activities	**(929)**	(1,083)	(731)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	**394**	596	100
Payments for the redemption of long-term debt	**—**	(350)	—
Notes payable to affiliated companies	**54**	278	(166)
Capital contribution from parent	**—**	150	300
Net cash provided by financing activities	**448**	674	234
Net decrease in cash and cash equivalents	**—**	—	(19)
Cash and cash equivalents at beginning of period	**—**	—	19
Cash and cash equivalents at end of period	**$ —**	$ —	$ —
Supplemental Disclosures:			
Cash paid for interest, net of amount capitalized	**$ 115**	$ 84	$ 79
Cash received from income taxes	**(36)**	(31)	(16)
Significant non-cash transactions:			
Accrued capital expenditures	**106**	109	96

See Notes to Consolidated Financial Statements

PIEDMONT NATURAL GAS COMPANY, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in millions)	Common Stock	Retained Earnings	Total Equity
Balance at December 31, 2017	$ 860	$ 802	$ 1,662
Net income	—	129	129
Contribution from parent	300	—	300
Balance at December 31, 2018	$ 1,160	$ 931	$ 2,091
Net income	—	202	202
Contribution from parent	150	—	150
Balance at December 31, 2019	$ 1,310	$ 1,133	$ 2,443
Net income	—	**273**	**273**
Other	—	**(1)**	**(1)**
Balance at December 31, 2020	**$ 1,310**	**$ 1,405**	**$ 2,715**

See Notes to Consolidated Financial Statements

Combined Notes to Consolidated Financial Statements

For the Years Ended December 31, 2020, 2019 and 2018

Index to Combined Notes To Consolidated Financial Statements

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

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

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

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS AND BASIS OF CONSOLIDATION

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

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

These Consolidated Financial Statements include, after eliminating intercompany transactions and balances, the accounts of the Duke Energy Registrants and subsidiaries or VIEs where the respective Duke Energy Registrants have control. See Note 17 for additional information on VIEs. These Consolidated Financial Statements also reflect the Duke Energy Registrants' proportionate share of certain jointly owned generation and transmission facilities. See Note 8 for additional information on joint ownership. Substantially all of the Subsidiary Registrants' operations qualify for regulatory accounting.

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

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

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

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

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

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

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

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

COVID-19

The COVID-19 pandemic is having a significant impact on global health and economic environments. In March 2020, the World Health Organization declared COVID-19 a global pandemic, and the federal government proclaimed that the COVID-19 outbreak in the United States constitutes a national emergency. The Duke Energy Registrants are monitoring developments closely and responding appropriately. The company incurred approximately $112 million of incremental COVID-19 costs before deferral for the year ended December 31, 2020, included in Operation, maintenance and other on the Consolidated

Statements of Operations. Further, the company waived approximately $64 million of late payment fees for the year ended December 31, 2020. The company has deferred approximately $76 million of the incremental costs, which were primarily bad debt expense, personal protective equipment and cleaning supplies, and a cost component of late payment fees. See Notes 3, 6, 17, 18 and 23 for additional information as well as steps taken to mitigate the impacts to our business and customers from the COVID-19 pandemic.

Other Current Assets and Liabilities

The following table provides a description of amounts included in Other within Current Assets or Current Liabilities that exceed 5% of total Current Assets or Current Liabilities on the Duke Energy Registrants' Consolidated Balance Sheets at either December 31, 2020, or 2019.

		December 31,	
(in millions)	Location	2020	2019
Duke Energy			
Other accrued liabilities	Current Liabilities	$ 1,455	$ 604
Accrued compensation	Current Liabilities	662	862
Duke Energy Carolinas			
Accrued compensation	Current Liabilities	$ 213	$ 271
Other accrued liabilities	Current Liabilities	178	147
Progress Energy			
Customer deposits	Current Liabilities	$ 347	$ 354
Duke Energy Florida			
Customer deposits	Current Liabilities	$ 203	$ 209
Duke Energy Ohio			
Gas Storage	Current Assets	$ 21	$ —
Duke Energy Indiana			
Income taxes receivable	Current Assets	$ 9	$ 44

Discontinued Operations

Duke Energy has elected to present cash flows of discontinued operations combined with cash flows of continuing operations. Unless otherwise noted, the notes to these consolidated financial statements exclude amounts related to discontinued operations for all periods presented. For the years ended December 31, 2020, 2019 and 2018, the Income (Loss) From Discontinued Operations, net of tax on Duke Energy's Consolidated Statements of Operations is entirely attributable to controlling interest.

Noncontrolling Interest

Duke Energy maintains a controlling financial interest in certain less than wholly owned nonregulated subsidiaries. As a result, Duke Energy consolidates these subsidiaries and presents the third-party investors' portion of Duke Energy's net income (loss), net assets and comprehensive income (loss) as noncontrolling interest. Noncontrolling interest is included as a component of equity on the Consolidated Balance Sheet.

Several operating agreements of Duke Energy's subsidiaries with noncontrolling interest are subject to allocations of tax attributes and cash flows in accordance with contractual agreements that vary throughout the lives of the subsidiaries. Therefore, Duke Energy and the other investors' (the owners) interests in the subsidiaries are not fixed, and the subsidiaries apply the HLBV method in allocating income or loss and other comprehensive income or loss (all measured on a pretax basis) to the owners. The HLBV method measures the amounts that each owner would hypothetically claim at each balance sheet reporting date, including tax benefits realized by the owners, most of which is over the IRS recapture period, upon a hypothetical liquidation of the subsidiary at the net book value of its underlying assets. The change in the amount that each owner would hypothetically receive at the reporting date compared to the amount it would have received on the previous reporting date represents the amount of income or loss allocated to each owner for the reporting period.

Other operating agreements of Duke Energy's subsidiaries with noncontrolling interest allocate profit and loss based on their pro rata shares of the ownership interest in the respective subsidiary. Therefore, Duke Energy allocates net income or loss and other comprehensive income or loss of these subsidiaries to the owners based on their pro rata shares.

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

The following table presents cash received for the sale of noncontrolling interest and allocated losses to noncontrolling interest for the years ended December 31, 2020, and 2019.

	December 31,	
(in millions)	2020	2019
Noncontrolling Interest Capital Contributions		
Cash received for the sale of noncontrolling interest to tax equity members	$ 426	$ 428
Cash received for the sale of noncontrolling interest to pro rata share members	—	415
Total Noncontrolling Interest Capital Contributions	$ 426	$ 843
Noncontrolling Interest Allocation of Income		
Allocated losses to noncontrolling tax equity members utilizing the HLBV method	$ 271	$ 165
Allocated losses to noncontrolling members based on pro rata shares of ownership	24	12
Total Noncontrolling Interest Allocated Losses	$ 295	$ 177

2021 Sale of Minority Interest in Duke Energy Indiana

In January 2021, Duke Energy entered into a definitive agreement providing for the sale of a 19.9% minority interest in Duke Energy Indiana with an affiliate of GIC, Singapore's sovereign wealth fund and an experienced investor in U.S. infrastructure. To facilitate the transaction, Duke Energy will issue and sell membership interests in Duke Energy Indiana Holdco, LLC. a newly created holding company that will own 100% of the issued and outstanding membership interests in Duke Energy Indiana. The transaction will be completed following two closings for an aggregate purchase price of approximately $2 billion. The first closing is expected to be completed in the second quarter of 2021 and Duke Energy will issue and sell 11.1% of the membership interests in exchange for 50% of the purchase price. Under the terms of the agreement, Duke Energy has the discretion to determine the timing of the second closing, but it will occur no later than January 2023. At the second closing, Duke Energy will issue and sell additional membership interests such that GIC will own 19.9% of the membership interests for the remaining 50% of the purchase price. Duke Energy will continue to operate and retain control of Duke Energy Indiana and, therefore, no gain or loss is expected to be recognized in the Consolidated Statements of Operations. Additionally, the transaction will be reflected within Duke Energy Corporations' stockholders' equity as a sale of a noncontrolling interest.

Acquisitions

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

SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

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

Regulatory Accounting

The majority of the Duke Energy Registrants' operations are subject to price regulation for the sale of electricity and natural gas by state utility commissions or FERC. When prices are set on the basis of specific costs of the regulated operations and an effective franchise is in place such that sufficient natural gas or electric services can be sold to recover those costs, the Duke Energy Registrants apply regulatory accounting. Regulatory accounting changes the timing of the recognition of costs or revenues relative to a company that does not apply regulatory accounting. As a result, regulatory assets and regulatory liabilities are recognized on the Consolidated Balance Sheets. Regulatory assets and liabilities are amortized consistent with the treatment of the related cost in the ratemaking process. Regulatory assets are reviewed for recoverability each reporting period. If a regulatory asset is no longer deemed probable of recovery, the deferred cost is charged to earnings. See Note 3 for further information.

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

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

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

Cash, Cash Equivalents and Restricted Cash

All highly liquid investments with maturities of three months or less at the date of acquisition are considered cash equivalents. Duke Energy, Progress Energy and Duke Energy Florida have restricted cash balances related primarily to collateral assets, escrow deposits and VIEs. See Note 17 for additional information. Restricted cash amounts are included in Other within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets. The following table presents the components of cash, cash equivalents and restricted cash included in the Consolidated Balance Sheets.

	December 31, 2020			December 31, 2019		
	Duke Energy	Progress Energy	Duke Energy Florida	Duke Energy	Progress Energy	Duke Energy Florida
Current Assets						
Cash and cash equivalents	$ 259	$ 59	$ 11	$ 311	$ 48	$ 17
Other	194	39	39	222	39	39
Other Noncurrent Assets						
Other	103	102	—	40	39	—
Total cash, cash equivalents and restricted cash	$ 556	$ 200	$ 50	$ 573	$ 126	$ 56

Inventory

Inventory related to regulated operations is valued at historical cost. Inventory related to nonregulated operations is valued at the lower of cost or market. Inventory is charged to expense or capitalized to property, plant and equipment when issued, primarily using the average cost method. Excess or obsolete inventory is written down to the lower of cost or net realizable value. Once inventory has been written down, it creates a new cost basis for the inventory that is not subsequently written up. Provisions for inventory write-offs were not material at December 31, 2020, and 2019, respectively. The components of inventory are presented in the tables below.

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Materials and supplies	$ 2,312	$ 785	$ 999	$ 673	$ 325	$ 78	$ 307	$ 12
Coal	561	186	193	131	63	16	165	—
Natural gas, oil and other	294	39	183	107	76	16	1	56
Total inventory	$ 3,167	$ 1,010	$ 1,375	$ 911	$ 464	$ 110	$ 473	$ 68

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

Investments in Debt and Equity Securities

The Duke Energy Registrants classify investments in equity securities as FV-NI and investments in debt securities as AFS. Both categories are recorded at fair value on the Consolidated Balance Sheets. Realized and unrealized gains and losses on securities classified as FV-NI are reported through net income. Unrealized gains and losses for debt securities classified as AFS are included in AOCI until realized, unless it is determined the carrying value of an investment has a credit loss. For certain investments of regulated operations, such as substantially all of the NDTF, realized and unrealized gains and losses (including any credit losses) on debt securities are recorded as a regulatory asset or liability. The credit loss portion of debt securities of nonregulated operations are included in earnings. Investments in debt and equity securities are classified as either current or noncurrent based on management's intent and ability to sell these securities, taking into consideration current market liquidity. See Note 15 for further information.

Goodwill

Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont perform annual goodwill impairment tests as of August 31 each year at the reporting unit level, which is determined to be a business segment or one level below. Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont update these tests between annual tests if events or circumstances occur that would more likely than not reduce the fair value of a reporting unit below its carrying value. See Note 11 for further information.

Intangible Assets

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

RECs are used to measure compliance with renewable energy standards and are held primarily for consumption. See Note 11 for further information.

Long-Lived Asset Impairments

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

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

Equity Method Investment Impairments

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

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

Property, Plant and Equipment

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

	Years Ended December 31,		
	2020	2019	2018
Duke Energy	**3.0%**	3.1%	3.0%
Duke Energy Carolinas	**2.8%**	2.8%	2.8%
Progress Energy	**3.2%**	3.1%	2.9%
Duke Energy Progress	**3.1%**	3.1%	2.9%
Duke Energy Florida	**3.3%**	3.1%	3.0%
Duke Energy Ohio	**2.9%**	2.6%	2.8%
Duke Energy Indiana	**3.5%**	3.3%	3.3%
Piedmont	**2.3%**	2.4%	2.5%

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

When the Duke Energy Registrants sell entire regulated operating units, or retire or sell nonregulated properties, the original cost and accumulated depreciation and amortization balances are removed from Property, Plant and Equipment on the Consolidated Balance Sheets. Any gain or loss is recorded in earnings, unless otherwise required by the applicable regulatory body. See Note 10 for additional information.

Leases

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

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

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

Nuclear Fuel

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

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

Allowance for Funds Used During Construction and Interest Capitalized

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

AFUDC equity, a permanent difference for income taxes, reduces the ETR when capitalized and increases the ETR when depreciated or amortized. See Note 23 for additional information.

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

Asset Retirement Obligations

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

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

Accounts Payable

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

At December 31, 2020, $15 million, $1 million and $14 million of the outstanding Accounts payable balance for Duke Energy, Duke Energy Ohio and Piedmont, respectively, was sold to the financial institution by our suppliers. Suppliers invoices sold to the financial institution under the program totaled $45 million, $9 million and $36 million for the year ended December 31, 2020, for Duke Energy, Duke Energy Ohio and Piedmont, respectively. All activity related to amounts due to suppliers who elected to participate in the program are included within Net cash provided by operating activities on the Consolidated Statements of Cash Flows.

Revenue Recognition

Duke Energy recognizes revenue as customers obtain control of promised goods and services in an amount that reflects consideration expected in exchange for those goods or services. Generally, the delivery of electricity and natural gas results in the transfer of control to customers at the time the commodity is delivered and the amount of revenue recognized is equal to the amount billed to each customer, including estimated volumes delivered when billings have not yet occurred. See Note 18 for further information.

Derivatives and Hedging

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

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

See Note 14 for further information.

Captive Insurance Reserves

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

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

Unamortized Debt Premium, Discount and Expense

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

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

Preferred Stock

Preferred stock is reviewed to determine the appropriate balance sheet classification and embedded features, such as call options, are evaluated to determine if they should be bifurcated and accounted for separately. Costs directly related to the issuance of preferred stock is recorded as a reduction of the proceeds received. The liability for the dividend is recognized when declared. The accumulated dividends on the cumulative preferred stock is recognized to net income available to Duke Energy Corporation in the EPS calculation. See Note 19 for further information.

Loss Contingencies and Environmental Liabilities

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

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

See Notes 3 and 4 for further information.

Pension and Other Post-Retirement Benefit Plans

Duke Energy maintains qualified, non-qualified and other post-retirement benefit plans. Eligible employees of the Subsidiary Registrants participate in the respective qualified, non-qualified and other post-retirement benefit plans and the Subsidiary Registrants are allocated their proportionate share of benefit costs. See Note 22 for further information, including significant accounting policies associated with these plans.

Severance and Special Termination Benefits

Duke Energy has severance plans under which in general, the longer a terminated employee worked prior to termination the greater the amount of severance benefits. A liability for involuntary severance is recorded once an involuntary severance plan is committed to by management if involuntary severances are probable and can be reasonably estimated. For involuntary severance benefits incremental to its ongoing severance plan benefits, the fair value of the obligation is expensed at the communication date if there are no future service requirements or over the required future service period. Duke Energy also offers special termination benefits under voluntary severance programs. Special termination benefits are recorded immediately upon employee acceptance absent a significant retention period. Otherwise, the cost is recorded over the remaining service period. Employee acceptance of voluntary severance benefits is determined by management based on the facts and circumstances of the benefits being offered. See Note 20 for further information.

Guarantees

If necessary, liabilities are recognized at the time of issuance or material modification of a guarantee for the estimated fair value of the obligation it assumes. Fair value is estimated using a probability weighted approach. The obligation is reduced over the term of the guarantee or related contract in a systematic and rational method as risk is reduced. Duke Energy recognizes a liability for the best estimate of its loss due to the nonperformance of the guaranteed party. This liability is recognized at the inception of a guarantee and is updated periodically. See Note 7 for further information.

Stock-Based Compensation

Stock-based compensation represents costs related to stock-based awards granted to employees and Board of Directors members. Duke Energy recognizes stock-based compensation based upon the estimated fair value of awards, net of estimated forfeitures at the date of issuance. The recognition period for these costs begins at either the applicable service inception date or grant date and continues throughout the requisite service period. Compensation cost is recognized as expense or capitalized as a component of property, plant and equipment. See Note 21 for further information.

Income Taxes

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

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

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

See Note 23 for further information.

Accounting for Renewable Energy Tax Credits

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

When Duke Energy receives ITCs on wind or solar facilities associated with its regulated operations, the ITC is deferred and amortized as a reduction of income tax expense over the estimated useful lives of the related properties.

Duke Energy receives PTCs on wind facilities that are recognized as electricity is produced and records related amounts as a reduction of income tax expense.

Excise Taxes

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

	Years Ended December 31,		
(in millions)	2020	2019	2018
Duke Energy	**$ 415**	$ 421	$ 405
Duke Energy Carolinas	**43**	39	35
Progress Energy	**249**	256	241
Duke Energy Progress	**26**	21	19
Duke Energy Florida	**223**	235	222
Duke Energy Ohio	**96**	101	105
Duke Energy Indiana	**25**	23	22
Piedmont	**2**	2	2

Dividend Restrictions and Unappropriated Retained Earnings

Duke Energy does not have any current legal, regulatory or other restrictions on paying common stock dividends to shareholders. However, if Duke Energy were to defer dividend payments on the preferred stock, the declaration of common stock dividends would be prohibited. See Note 19 for more information. Additionally, as further described in Note 3, Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio, Duke Energy Indiana and Piedmont have restrictions on paying dividends or otherwise advancing funds to Duke Energy due to conditions established by regulators in conjunction with merger transaction approvals. At December 31, 2020, and 2019, an insignificant amount of Duke Energy's consolidated Retained earnings balance represents undistributed earnings of equity method investments.

New Accounting Standards

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

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

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

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

Duke Energy recorded cumulative effects of changes in accounting principles related to the adoption of new credit loss standard, for allowances and credit losses of trade and other receivables, insurance receivables and financial guarantees. These amounts are included in the Condensed Consolidated Balance Sheets in Receivables, Receivables of VIEs, Other Noncurrent Assets and Other Noncurrent Liabilities. See Notes 7 and 18 for more information.

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

	December 31, 2020					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Piedmont
Total pretax impact to Retained Earnings	**$ 120**	**$ 16**	**$ 2**	**$ 1**	**$ 1**	**$ 1**

The following new accounting standard has been issued but not yet adopted by the Duke Energy Registrants as of December 31, 2020.

Reference Rate Reform. In March 2020, the FASB issued new accounting guidance for reference rate reform. This guidance is elective and provides expedients to facilitate financial reporting for the anticipated transition away from the London Inter-bank Offered Rate (LIBOR) and other interbank reference rates by the end of 2021. The optional expedients are effective for modification of existing contracts or new arrangements executed between March 12, 2020, through December 31, 2022.

Duke Energy has variable-rate debt and manages interest rate risk by entering into financial contracts including interest rate swaps that are generally indexed to LIBOR. Impacted financial arrangements extending beyond 2021 may require contractual amendment or termination to fully adapt to a post-LIBOR environment. Duke Energy is assessing these financial arrangements and is evaluating the use of optional expedients outlined in the new accounting guidance. Alternative index provisions are also being assessed and incorporated into new financial arrangements that extend beyond 2021. The full outcome of the transition away from LIBOR cannot be determined at this time, but is not expected to have a material impact on the financial statements.

2. BUSINESS SEGMENTS

Reportable segments are determined based on information used by the chief operating decision-maker in deciding how to allocate resources and evaluate the performance of the business. Duke Energy evaluates segment performance based on segment income. Segment income is defined as income from continuing operations net of income attributable to noncontrolling interests and preferred stock dividends. Segment income, as discussed below, includes intercompany revenues and expenses that are eliminated on the Consolidated Financial Statements. Certain governance costs are allocated to each segment. In addition, direct interest expense and income taxes are included in segment income.

Products and services are sold between affiliate companies and reportable segments of Duke Energy at cost. Segment assets as presented in the tables that follow exclude all intercompany assets.

Duke Energy

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

The Electric Utilities and Infrastructure segment includes Duke Energy's regulated electric utilities in the Carolinas, Florida and the Midwest. The regulated electric utilities conduct operations through the Subsidiary Registrants that are substantially all regulated and, accordingly, qualify for regulatory accounting treatment. Electric Utilities and Infrastructure also includes Duke Energy's electric transmission infrastructure investments.

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

The Commercial Renewables segment is primarily comprised of nonregulated utility-scale wind and solar generation assets located throughout the U.S.

The remainder of Duke Energy's operations is presented as Other, which is primarily comprised of interest expense on holding company debt, unallocated corporate costs and Duke Energy's wholly owned captive insurance company, Bison. Other also includes Duke Energy's interest in NMC. See Note 12 for additional information on the investment in NMC.

Business segment information is presented in the following tables. Segment assets presented exclude intercompany assets.

	Year Ended December 31, 2020						
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total Reportable Segments	Other	Eliminations	Total
Unaffiliated Revenues	$ 21,687	$ 1,653	$ 502	$ 23,842	$ 26	$ —	$ 23,868
Intersegment Revenues	33	95	—	128	71	(199)	—
Total Revenues	$ 21,720	$ 1,748	$ 502	$ 23,970	$ 97	$ (199)	$ 23,868
Interest Expense	$ 1,320	$ 135	$ 66	$ 1,521	$ 657	$ (16)	$ 2,162
Depreciation and amortization	4,068	258	199	4,525	209	(29)	4,705
Equity in earnings (losses) of unconsolidated affiliates	(1)	(2,017)	—	(2,018)	13	—	(2,005)
Income tax expense (benefit)	340	(349)	(65)	(74)	(162)	—	(236)
Segment income (loss)[(a)(b)(c)]	2,669	(1,266)	286	1,689	(426)	—	1,263
Less noncontrolling interest							295
Add back preferred stock dividend							107
Income from discontinued operations, net of tax							7
Net income							$ 1,082
Capital investments expenditures and acquisitions	$ 7,629	$ 1,309	$ 1,219	$ 10,157	$ 264	$ —	$ 10,421
Segment assets	138,225	13,849	6,716	158,790	3,598	—	162,388

(a) Electric Utilities and Infrastructure includes $948 million of Impairment charges and a reversal of $152 million included in Regulated electric operating revenue related to the CCR Settlement Agreement filed with the NCUC. Additionally, Electric Utilities and Infrastructure includes $19 million of Impairment charges related to the Clemson University Combined Heat and Power Plant, $5 million of Impairment charges related to the gas pipeline assets and $16 million of shareholder contributions within Operations, maintenance and other related to Duke Energy Carolinas' and Duke Energy Progress' 2019 North Carolina rate cases. See Note 3 for additional information.

(b) Gas Utilities and Infrastructure includes $2.1 billion recorded within Equity in (losses) earnings of unconsolidated affiliates and $7 million of Impairment charges related to gas pipeline investments. See Notes 3 and 12 for additional information.

(c) Other includes a $98 million reversal of 2018 severance costs due to a partial settlement in the Duke Energy Carolinas' 2019 North Carolina rate case. See Note 3 and 20 for additional information.

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

(a) Electric Utilities and Infrastructure includes a $27 million reduction of a prior year impairment at Citrus County CC related to the plant's cost cap. See Note 3 for additional information.
(b) Gas Utilities and Infrastructure includes an after-tax impairment charge of $19 million for the remaining investment in Constitution. See Note 12 for additional information.

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

(a) All segments include adjustments to the December 31, 2017, estimate of the income tax effects of the Tax Act. Electric Utilities and Infrastructure includes a $24 million expense, Gas Utilities and Infrastructure includes a $1 million expense, Commercial Renewables includes a $3 million benefit and Other includes a $2 million benefit. See Note 23 for additional information.
(b) Electric Utilities and Infrastructure includes after-tax regulatory and legislative impairment charges of $202 million related to rate case orders, settlements or other actions of regulators or legislative bodies and an after-tax impairment charge of $46 million related to the Citrus County CC at Duke Energy Florida. See Note 3 for additional information.
(c) Gas Utilities and Infrastructure includes an after-tax impairment charge of $42 million for the investment in Constitution. See Note 12 for additional information.
(d) Commercial Renewables includes an impairment charge of $91 million, net of $2 million Noncontrolling interests, related to goodwill. See Note 11 for additional information.
(e) Other includes $65 million of after-tax costs to achieve the Piedmont merger, $144 million of after-tax severance charges related to a companywide initiative and an $82 million after-tax loss on the sale of Beckjord described below. For additional information, see Note 1 for the Piedmont merger and Note 20 for severance charges.

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

Geographical Information

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

Major Customers

For the year ended December 31, 2020, revenues from one customer of Duke Energy Progress are $553 million. Duke Energy Progress has one reportable segment, Electric Utilities and Infrastructure. No other Subsidiary Registrant has an individual customer representing more than 10% of its revenues.

Products and Services

The following table summarizes revenues of the reportable segments by type.

(in millions)	Retail Electric	Wholesale Electric	Retail Natural Gas	Other	Total Revenues
2020					
Electric Utilities and Infrastructure	**$ 18,898**	**$ 1,878**	**$ —**	**$ 944**	**$ 21,720**
Gas Utilities and Infrastructure	**—**	**—**	**1,691**	**57**	**1,748**
Commercial Renewables	**—**	**434**	**—**	**68**	**502**
Total Reportable Segments	**$ 18,898**	**$ 2,312**	**$ 1,691**	**$ 1,069**	**$ 23,970**
2019					
Electric Utilities and Infrastructure	$ 19,745	$ 2,231	$ —	$ 855	$ 22,831
Gas Utilities and Infrastructure	—	—	1,782	84	1,866
Commercial Renewables	—	389	—	98	487
Total Reportable Segments	$ 19,745	$ 2,620	$ 1,782	$ 1,037	$ 25,184
2018					
Electric Utilities and Infrastructure	$ 19,013	$ 2,345	$ —	$ 915	$ 22,273
Gas Utilities and Infrastructure	—	—	1,817	64	1,881
Commercial Renewables	—	375	—	102	477
Total Reportable Segments	$ 19,013	$ 2,720	$ 1,817	$ 1,081	$ 24,631

Duke Energy Ohio

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

Electric Utilities and Infrastructure transmits and distributes electricity in portions of Ohio and generates, distributes and sells electricity in portions of Northern Kentucky. Gas Utilities and Infrastructure transports and sells natural gas in portions of Ohio and Northern Kentucky. Both reportable segments conduct operations primarily through Duke Energy Ohio and its wholly owned subsidiary, Duke Energy Kentucky. The remainder of Duke Energy Ohio's operations is presented as Other.

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

	Year Ended December 31, 2020					
(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Total Reportable Segments	Other	Eliminations	Total
Total revenues	$ 1,405	$ 453	$ 1,858	$ —	$ —	$ 1,858
Interest expense	$ 85	$ 17	$ 102	$ —	$ —	$ 102
Depreciation and amortization	200	78	278	—	—	278
Income tax expense (benefit)	19	26	45	(2)	—	43
Segment income (loss)/Net income	162	96	258	(6)	—	252
Capital expenditures	$ 548	$ 286	$ 834	$ —	$ —	$ 834
Segment assets	6,615	3,380	9,995	32	(2)	10,025

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

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

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

3. REGULATORY MATTERS

REGULATORY ASSETS AND LIABILITIES

The Duke Energy Registrants record regulatory assets and liabilities that result from the ratemaking process. See Note 1 for further information.

The following tables present the regulatory assets and liabilities recorded on the Consolidated Balance Sheets of Duke Energy and Progress Energy. See separate tables below for balances by individual registrant.

	Duke Energy		Progress Energy	
	December 31,		December 31,	
(in millions)	2020	2019	2020	2019
Regulatory Assets				
AROs – coal ash	**$ 3,408**	$ 4,084	**$1,357**	$ 1,843
AROs – nuclear and other	**754**	739	**685**	668
Accrued pension and OPEB	**2,317**	2,391	**875**	897
Storm cost deferrals	**1,102**	1,399	**893**	1,214
Nuclear asset securitized balance, net	**991**	1,042	**991**	1,042
Debt fair value adjustment	**950**	1,019	**—**	—
Retired generation facilities	**417**	331	**363**	266
Post-in-service carrying costs (PISCC) and deferred operating expenses	**402**	329	**51**	33
Deferred asset – Lee and Harris COLA	**356**	388	**32**	38
Hedge costs deferrals	**351**	356	**148**	129
Advanced metering infrastructure (AMI)	**311**	338	**102**	114
Demand side management (DSM)/Energy Efficiency (EE)	**288**	343	**241**	241
Vacation accrual	**221**	214	**42**	41
Deferred fuel and purchased power	**213**	528	**162**	305
COR settlement	**128**	133	**33**	35
NCEMPA deferrals	**124**	72	**124**	72
Nuclear deferral	**123**	107	**35**	40
Derivatives – natural gas supply contracts	**122**	117	**—**	—
CEP deferral	**117**	76	**—**	—
Amounts due from customers	**110**	36	**—**	—
Qualifying facility contract buyouts	**107**	121	**107**	121
Customer connect project	**105**	65	**55**	37
Manufactured gas plant (MGP)	**104**	102	**—**	—
ABSAT, coal ash basin closure	**98**	65	**27**	15
Deferred pipeline integrity costs	**92**	79	**—**	—
Deferred severance charges	**86**	—	**29**	—
Incremental COVID-19 expenses	**76**	—	**23**	—
Other	**589**	544	**158**	141
Total regulatory assets	**14,062**	15,018	**6,533**	7,292
Less: current portion	**1,641**	1,796	**758**	946
Total noncurrent regulatory assets	**$12,421**	$13,222	**$5,775**	$ 6,346
Regulatory Liabilities				
Net regulatory liability related to income taxes	**$ 7,368**	$ 7,872	**$2,411**	$ 2,595
Costs of removal	**5,883**	5,756	**2,666**	2,561
AROs – nuclear and other	**1,512**	1,100	**—**	—
Provision for rate refunds	**344**	370	**123**	123
Accrued pension and OPEB	**177**	176	**—**	—
Amounts to be refunded to customers	**51**	34	**—**	—
Deferred fuel and purchased power	**18**	1	**—**	1
Other	**1,053**	739	**491**	275
Total regulatory liabilities	**16,406**	16,048	**5,691**	5,555
Less: current portion	**1,377**	784	**640**	330
Total noncurrent regulatory liabilities	**$15,029**	$15,264	**$5,051**	$ 5,225

Descriptions of regulatory assets and liabilities summarized in the tables above and below follow. See tables below for recovery and amortization periods at the separate registrants.

AROs – coal ash. Represents deferred depreciation and accretion related to the legal obligation to close ash basins. The costs are deferred until recovery treatment has been determined. See Notes 1 and 9 for additional information.

AROs – nuclear and other. Represents regulatory assets or liabilities, including deferred depreciation and accretion, related to legal obligations associated with the future retirement of property, plant and equipment, excluding amounts related to coal ash. The AROs relate primarily to decommissioning nuclear power facilities. The amounts also include certain deferred gains and losses on NDTF investments. See Notes 1 and 9 for additional information.

Accrued pension and OPEB. Accrued pension and OPEB represent regulatory assets and liabilities related to each of the Duke Energy Registrants' respective shares of unrecognized actuarial gains and losses and unrecognized prior service cost and credit attributable to Duke Energy's pension plans and OPEB plans. The regulatory asset or liability is amortized with the recognition of actuarial gains and losses and prior service cost and credit to net periodic benefit costs for pension and OPEB plans. The accrued pension and OPEB regulatory assets are expected to be recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

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

Nuclear asset securitized balance, net. Represents the balance associated with Crystal River Unit 3 retirement approved for recovery by the FPSC on September 15, 2015, and the upfront financing costs securitized in 2016 with issuance of the associated bonds. The regulatory asset balance is net of the AFUDC equity portion.

Debt fair value adjustment. Purchase accounting adjustments recorded to state the carrying value of Progress Energy and Piedmont at fair value in connection with the 2012 and 2016 mergers, respectively. Amount is amortized over the life of the related debt.

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

Post-in-service carrying costs (PISCC) and deferred operating expenses. Represents deferred depreciation and operating expenses as well as carrying costs on the portion of capital expenditures placed in service but not yet reflected in retail rates as plant in service.

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

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

AMI. Represents deferred costs related to the installation of AMI meters and remaining net book value of non-AMI meters to be replaced at Duke Energy Carolinas, net book value of existing meters at Duke Energy Florida, Duke Energy Progress and Duke Energy Ohio and future recovery of net book value of electromechanical meters that have been replaced with AMI meters at Duke Energy Indiana.

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

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

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

COR settlement. Represents approved COR settlements that are being amortized over the average remaining lives, at the time of approval, of the associated assets.

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

Nuclear deferral. Includes amounts related to levelizing nuclear plant outage costs, which allows for the recognition of nuclear outage expenses over the refueling cycle rather than when the outage occurs, resulting in the deferral of operations and maintenance costs associated with refueling.

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

CEP deferral. Represents deferred depreciation, PISCC and deferred property tax for Duke Energy Ohio Gas capital assets for the Capital Expenditure Program (CEP).

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

Qualifying facility contract buyouts. Represents termination payments for regulatory recovery through the capacity clause.

Customer connect project. Represents incremental operating expenses and carrying costs on deferred amounts related to the deployment of the new customer information system known as the Customer Connect Project.

MGP. Represents remediation costs incurred at former MGP sites and the deferral of costs to be incurred at Duke Energy Ohio's East End and West End sites.

ABSAT, coal ash basin closure. Represents deferred depreciation and returns associated with Ash Basin Strategic Action Team (ABSAT) capital assets related to converting the ash handling system from wet to dry.

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

Deferred severance charges. Represents costs incurred for employees separation from Duke Energy.

Incremental COVID-19 expenses. Represents incremental costs related to ensuring continuity and quality of service in a safe manner during the COVID-19 pandemic.

Net regulatory liability related to income taxes. Amounts for all registrants include regulatory liabilities related primarily to impacts from the Tax Act. See Note 23 for additional information. Amounts have no immediate impact on rate base as regulatory assets are offset by deferred tax liabilities.

Costs of removal. Represents funds received from customers to cover the future removal of property, plant and equipment from retired or abandoned sites as property is retired. Also includes certain deferred gains on NDTF investments.

Provisions for rate refunds. Represents estimated amounts due to customers based on recording interim rates subject to refund.

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

RESTRICTIONS ON THE ABILITY OF CERTAIN SUBSIDIARIES TO MAKE DIVIDENDS, ADVANCES AND LOANS TO DUKE ENERGY

As a condition to the approval of merger transactions, the NCUC, PSCSC, PUCO, KPSC and IURC imposed conditions on the ability of Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio, Duke Energy Kentucky, Duke Energy Indiana and Piedmont to transfer funds to Duke Energy through loans or advances, as well as restricted amounts available to pay dividends to

Duke Energy. Certain subsidiaries may transfer funds to the Parent by obtaining approval of the respective state regulatory commissions. These conditions imposed restrictions on the ability of the public utility subsidiaries to pay cash dividends as discussed below.

Duke Energy Progress and Duke Energy Florida also have restrictions imposed by their first mortgage bond indentures, which in certain circumstances, limit their ability to make cash dividends or distributions on common stock. Amounts restricted as a result of these provisions were not material at December 31, 2020.

Duke Energy Indiana has certain dividend restrictions as a result of the agreement entered in January 2021 to sell a minority interest to GIC. Duke Energy Indiana will not declare a dividend prior to the first closing, which is expected to be completed in the second quarter of 2021, and will declare dividends between the first closing and the second closing, which is required to be completed no later than January 2023, in accordance with the sale agreement. See additional information in Note 1.

Additionally, certain other subsidiaries of Duke Energy have restrictions on their ability to dividend, loan or advance funds to Duke Energy due to specific legal or regulatory restrictions, including, but not limited to, minimum working capital and tangible net worth requirements.

The restrictions discussed below were not a material amount of Duke Energy's and Progress Energy's net assets at December 31, 2020.

Duke Energy Carolinas

Duke Energy Carolinas must limit cumulative distributions subsequent to mergers to (i) the amount of retained earnings on the day prior to the closing of the mergers, plus (ii) any future earnings recorded.

Duke Energy Progress

Duke Energy Progress must limit cumulative distributions subsequent to the mergers between Duke Energy and Progress Energy and Duke Energy and Piedmont to (i) the amount of retained earnings on the day prior to the closing of the respective mergers, plus (ii) any future earnings recorded.

Duke Energy Ohio

Duke Energy Ohio will not declare and pay dividends out of capital or unearned surplus without the prior authorization of the PUCO. Duke Energy Ohio received FERC and PUCO approval to pay dividends from its equity accounts that are reflective of the amount that it would have in its retained earnings account had push-down accounting for the Cinergy merger not been applied to Duke Energy Ohio's balance sheet. The conditions include a commitment from Duke Energy Ohio that equity, adjusted to remove the impacts of push-down accounting, will not fall below 30% of total capital.

Duke Energy Kentucky is required to pay dividends solely out of retained earnings and to maintain a minimum of 35% equity in its capital structure.

Duke Energy Indiana

Duke Energy Indiana must limit cumulative distributions subsequent to the merger between Duke Energy and Cinergy to (i) the amount of retained earnings on the day prior to the closing of the merger, plus (ii) any future earnings recorded. In addition, Duke Energy Indiana will not declare and pay dividends out of capital or unearned surplus without prior authorization of the IURC.

Piedmont

Piedmont must limit cumulative distributions subsequent to the acquisition of Piedmont by Duke Energy to (i) the amount of retained earnings on the day prior to the closing of the merger, plus (ii) any future earnings recorded.

RATE-RELATED INFORMATION

The NCUC, PSCSC, FPSC, IURC, PUCO, TPUC and KPSC approve rates for retail electric and natural gas services within their states. The FERC approves rates for electric sales to wholesale customers served under cost-based rates (excluding Ohio and Indiana), as well as sales of transmission service. The FERC also regulates certification and siting of new interstate natural gas pipeline projects.

Duke Energy Carolinas and Duke Energy Progress

2021 Coal Ash Settlement

On January 22, 2021, Duke Energy Carolinas and Duke Energy Progress entered into the Coal Combustion Residuals Settlement Agreement (the "CCR Settlement Agreement") with the North Carolina Public Staff (Public Staff), the North Carolina Attorney General's Office and the Sierra Club (collectively, the "Settling Parties"), which was filed with the NCUC on January 25, 2021. The CCR Settlement Agreement resolves all coal ash prudence and cost recovery issues in connection with 2019 rate cases filed by Duke Energy Carolinas and Duke Energy Progress with the NCUC, as well as the equitable sharing issue on remand from the 2017 Duke Energy Carolinas and Duke Energy Progress North Carolina rate cases as a result of the December 11, 2020, North Carolina Supreme Court opinion. The settlement also provides clarity on coal ash cost recovery in North Carolina for Duke Energy Carolinas and Duke Energy Progress through January 2030 and February 2030 (the "Term"), respectively.

Duke Energy Carolinas and Duke Energy Progress agreed not to seek recovery of approximately $1 billion of systemwide deferred coal ash expenditures, but will retain the ability to earn a debt and equity return during the amortization period, which shall be five years in the pending 2019 North Carolina rate cases and will be set by the NCUC in future rate case proceedings. The equity return and the amortization period on deferred coal ash costs under the 2017 Duke Energy Carolinas and Duke Energy Progress North Carolina rate cases will remain unaffected. The equity return on deferred coal ash costs under the 2019 North Carolina rate cases and future rate cases in North Carolina will be set at 150 basis points lower than the authorized return on equity then in effect, with a capital structure composed of 48% debt and 52% equity. Duke Energy Carolinas and Duke Energy Progress retain the ability to earn a full WACC return during the deferral period, which is the period from when costs are incurred until they are recovered in rates.

The Settling Parties agreed that execution by Duke Energy Carolinas and Duke Energy Progress of a settlement agreement between themselves and the NCDEQ dated December 31, 2019, (the "DEQ Settlement") and the coal ash management plans included therein or subsequently approved by DEQ are reasonable and prudent. The Settling Parties retain the right to challenge the reasonableness and prudence of actions taken by Duke Energy Carolinas and Duke Energy Progress and costs incurred to implement the scope of work agreed upon in the DEQ Settlement, after February 1, 2020, and March 1, 2020, for Duke Energy Carolinas and Duke Energy Progress, respectively. The Settling Parties further agreed to waive rights through the Term to challenge the reasonableness or prudence of Duke Energy Carolinas' and Duke Energy Progress' historical coal ash management practices, and to waive the right to assert any arguments that future coal ash costs, including financing costs, shall be shared between either company and customers through equitable sharing or any other rate base or return adjustment that shares the revenue requirement burden of coal ash costs not otherwise disallowed due to imprudence.

The Settling Parties agreed to a sharing arrangement for future coal ash insurance litigation proceeds between Duke Energy Carolinas and Duke Energy Progress and North Carolina customers, if achieved.

The settlement is subject to the review and approval of the NCUC. The Settling Parties requested an expedited review by the NCUC and anticipate an order on the pending 2019 North Carolina rate cases for Duke Energy Carolinas and Duke Energy Progress by the second quarter of 2021. On January 29, 2021, Duke Energy Carolinas and Duke Energy Progress filed joint motions with the Settling Parties seeking approval of the CCR Settlement Agreement, along with supporting testimony and exhibits from Duke Energy Carolinas and Duke Energy Progress. On February 5, 2021, the Public Staff filed testimony and exhibits supporting the CCR Settlement Agreement.

As a result of the CCR Settlement Agreement, Duke Energy Carolinas and Duke Energy Progress recorded a pretax charge of approximately $454 million and $494 million, respectively, in the fourth quarter of 2020 to Impairment charges and a reversal of approximately $50 million and $102 million, respectively, to Regulated electric operating revenues on the respective Consolidated Statements of Operations.

COVID-19 Filings

North Carolina

On March 10, 2020, Governor Roy Cooper declared a state of emergency due to the COVID-19 pandemic. On March 19, 2020, the NCUC issued an order directing that utilities under its jurisdiction suspend disconnections for nonpayment of utility bills during the state of emergency and allow for customers to enter into payment arrangements to pay off arrearages accumulated during the state of emergency after the end of the state of emergency. Additionally, to help mitigate the financial impacts of the COVID-19 pandemic on their customers, on March 19, 2020, Duke Energy Carolinas and Duke Energy Progress filed a request with the NCUC seeking authorization to waive: (1) any late payment charges incurred by a residential or nonresidential customer, effective March 21, 2020; (2) the application of fees for checks returned for insufficient funds for residential and nonresidential customers; (3) the reconnection charge when a residential or nonresidential customer seeks to have service restored for those customers whose service was recently disconnected for nonpayment and to work with customers regarding the other requirements to restore service, including re-establishment of credit; and (4) the fees and charges associated with the use of credit cards or debit cards to pay residential electric utility bills, effective March 21, 2020. The NCUC granted the companies' request on March 20, 2020.

On July 29, 2020, the NCUC issued its Order Lifting Disconnection Moratorium and Allowing Collection of Arrearages Pursuant to Special Repayment Plans. The order contained the following: (1) public utilities may resume customer disconnections due to nonpayment for bills first rendered on or after September 1, 2020, after appropriate notice; (2) the late fee moratorium will continue through the end of the state of emergency or until further order of the Commission; (3) Duke Energy utilities may reinstate fees for checks returned for insufficient funds as well as transaction fees for use of credit cards or debit cards for bills first rendered on or after September 1, 2020; and (4) no sooner than September 1, 2020, the collection of past-due or delinquent accounts accrued up to and including August 31, 2020, may proceed subject to conditions. Duke Energy Carolinas and Duke Energy Progress resumed normal billing practices as of October 1, 2020, with the exception of the billing of late payment charges. Customers were notified of the resumption of normal billing practices, the option of deferred payment arrangements and where to find assistance, if necessary. Service disconnections for nonpayment for residential customers resumed on November 2, 2020.

Duke Energy Carolinas and Duke Energy Progress filed a joint petition on August 7, 2020, with the NCUC for deferral treatment of incremental costs and waived customer fees due to the COVID-19 pandemic. Comments on the joint petition were filed on November 5, 2020, and reply comments were filed on November 30, 2020. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of this matter.

South Carolina

On March 13, 2020, Governor Henry McMaster declared a state of emergency due to the COVID-19 pandemic. The governor also issued a letter on March 14, 2020, to the ORS Executive Director regarding the suspension of disconnection of essential utility services for nonpayment. On March 18, 2020, the PSCSC issued an order approving such waivers, and also approved waivers for regulations related to late fees and reconnect fees. The PSCSC's order also required utilities to track the financial impacts of actions taken pursuant to such waivers for possible reporting to the PSCSC.

On May 13, 2020, the ORS filed a letter with the PSCSC that included a request from Governor McMaster that utilities proceed with developing and implementing plans for phasing in normal business operations. On May 14, 2020, the PSCSC conditionally vacated the regulation waivers regarding termination of service and suspension of disconnect fees. Prior to termination, utilities are to refer past-due customers to local organizations for assistance and/or deferred payment arrangements. Duke Energy Carolinas and Duke Energy Progress filed a report on June 30, 2020, as required by PSCSC order, reporting revenue impact, costs and savings related to COVID-19 to date. On August 14, 2020, Duke Energy Carolinas and Duke Energy Progress filed a joint petition with the PSCSC for approval of an accounting order to defer incremental COVID-19 related costs incurred through June 30, 2020, and for the ongoing months during the duration of the COVID-19 pandemic. The deferral request did not include lost revenues. Updates on cost impacts were filed on September 30, 2020, and included financial impacts through the end of August 2020. On October 16, 2020, the ORS requested the PSCSC delay taking formal action on the deferral request until the ORS and any intervenors complete discovery. The PSCSC issued an order on October 21, 2020, to grant additional time to complete discovery until January 20, 2021, and to establish a procedural schedule. Updates on cost impacts were filed on December 30, 2020, and included financial impacts through November 30, 2020. On January 15, 2021, ORS requested the PSCSC suspend the dates for the ORS report and public hearing. The ORS conferred with the companies regarding the status of the docket, and the parties mutually agreed that recently enacted federal laws addressing COVID-19 aid and recovery should be studied before further action is taken in this docket. On January 27, 2021, the PSCSC voted to grant the ORS request to suspend the virtual public hearing. ORS is to file its report on or before March 29, 2021.

On August 17, 2020, Duke Energy Carolinas and Duke Energy Progress filed an update on their planned return to normal operations during the COVID-19 pandemic. Normal billing practices resumed in South Carolina as of October 1, 2020, and service disconnections for nonpayment resumed on October 12, 2020. Customers were notified of the resumption of normal billing practices, the option of payment arrangements and where to find assistance, if necessary. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of this matter.

2020 North Carolina Storm Securitization Filings

On October 26, 2020, Duke Energy Carolinas and Duke Energy Progress filed a joint petition with the NCUC, as agreed to in partial settlements reached in the 2019 North Carolina Rate Cases for Duke Energy Carolinas and Duke Energy Progress, seeking authorization for the financing of the costs of each utility's storm recovery activities required as a result of Hurricane Florence, Hurricane Michael, Hurricane Dorian and Winter Storm Diego. Specifically, Duke Energy Carolinas and Duke Energy Progress requested that the NCUC find that their storm recovery costs and related financing costs are appropriately financed by debt secured by storm recovery property, and that the Commission issue financing orders by which each utility may accomplish such financing using a securitization structure. On January 27, 2021, Duke Energy Carolinas, Duke Energy Progress and the Public Staff filed an Agreement and Stipulation of Partial Settlement, which is subject to review and approval of the NCUC, resolving certain accounting issues, including agreement to support an 18- to 20-year bond period. The total revenue requirement over a proposed 20-year bond period for the storm recovery charges is approximately $287 million for Duke Energy Carolinas and $920 million for Duke Energy Progress.

A remote evidentiary hearing ended on January 29, 2021, and on February 1, 2021, the NCUC granted a motion by Duke Energy Carolinas and Duke Energy Progress for a temporary 30-day waiver of the 135-day time frame for the NCUC to issue orders on the joint petition, extending the deadline for the NCUC to issue an order to no later than April 9, 2021. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of this matter.

Duke Energy Carolinas

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Carolinas' Consolidated Balance Sheets.

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	2020	2019	a Return	Period Ends
Regulatory Assets[(a)]				
AROs – coal ash	**$ 1,414**	$ 1,696	(h)	(b)
Accrued pension and OPEB[(c)]	**427**	477	Yes	(i)
Storm cost deferrals	**205**	178	Yes	(b)
Retired generation facilities[(c)]	**11**	16	Yes	2023
PISCC[(c)]	**32**	33	Yes	(b)
Deferred asset – Lee COLA	**324**	350		(b)
Hedge costs deferrals[(c)]	**174**	198	Yes	2041
AMI	**154**	166	Yes	(b)
DSM/EE	**46**	100	(g)	(g)
Vacation accrual	**84**	80		2021
Deferred fuel and purchased power	**42**	222	(e)	2022
COR settlement	**95**	98	Yes	(b)
Nuclear deferral	**88**	67		2022
Customer connect project	**50**	28	Yes	(b)
ABSAT, coal ash basin closure	**71**	50	Yes	(b)
Deferred severance charges	**57**	—		2022
Incremental COVID-19 expenses	**31**	—	Yes	(b)
Other	**164**	151		(b)
Total regulatory assets	**3,469**	3,910		
Less: current portion	**473**	550		
Total noncurrent regulatory assets	**$ 2,996**	$ 3,360		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes[(d)]	**$ 2,874**	$ 3,060		(b)
Costs of removal[(c)]	**1,975**	1,936	Yes	(f)
AROs – nuclear and other	**1,512**	1,100		(b)
Provision for rate refunds[(c)]	**170**	175	Yes	
Accrued pension and OPEB[(c)]	**32**	39	Yes	(i)
Deferred fuel and purchased power	**18**	—	(e)	2020
Other	**427**	368		(b)
Total regulatory liabilities	**7,008**	6,678		
Less: current portion	**473**	255		
Total noncurrent regulatory liabilities	**$ 6,535**	$ 6,423		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Includes regulatory liabilities related to the change in the federal tax rate as a result of the Tax Act and the change in the North Carolina tax rate, both discussed in Note 23. Portions are included in rate base.
(e) Pays interest on over-recovered costs in North Carolina. Includes certain purchased power costs in North Carolina and South Carolina and costs of distributed energy in South Carolina.
(f) Recovered over the life of the associated assets.
(g) Includes incentives on DSM/EE investments and is recovered through an annual rider mechanism.
(h) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.
(i) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

2017 North Carolina Rate Case

On August 25, 2017, Duke Energy Carolinas filed an application with the NCUC for a rate increase for retail customers of approximately $647 million. On February 28, 2018, Duke Energy Carolinas and the Public Staff filed an Agreement and Stipulation of Partial Settlement resolving certain portions of the proceeding. Terms of the settlement included a return on equity of 9.9% and a capital structure of 52% equity and 48% debt. On June 22, 2018, the NCUC issued an order approving the Stipulation of Partial Settlement and requiring a revenue reduction. As a result of the June 22, 2018, order, Duke Energy Carolinas recorded a pretax charge of approximately $150 million to Impairment charges and Operation, maintenance and other on the Consolidated Statements of Operations. The charge was primarily related to the denial of a return on the Lee Nuclear Project and the assessment of a $70 million cost of service penalty by reducing the annual recovery of deferred coal ash costs by $14 million per year over a five-year recovery period.

The North Carolina Attorney General and other parties separately filed Notices of Appeal to the North Carolina Supreme Court. The North Carolina Supreme Court consolidated the Duke Energy Carolinas and Duke Energy Progress appeals. On December 11, 2020, the North Carolina Supreme Court issued an opinion on the consolidated appeals of the 2018 Duke Energy Carolinas and Duke Energy Progress rate case orders which affirmed, in part, and reversed and remanded, in part, the NCUC's decisions. In the Opinion, the court upheld the NCUC's decision to include coal ash costs in the cost of service, as well as the NCUC's discretion to allow a return on the unamortized balance of coal ash costs. The court also remanded to the NCUC a single issue to consider the assessment of support for the Public Staff's equitable sharing argument. In response to a NCUC order seeking comments on the proposed procedure on remand, on January 11, 2021, Duke Energy Carolinas, Duke Energy Progress, the Public Staff, the North Carolina Attorney General, Sierra Club and Carolina Industrial Group for Fair Utility Rates II and III filed joint comments proposing that the NCUC not hold additional evidentiary hearings, but instead rely upon existing records in the 2017 North Carolina rate cases, or in the alternative the records in the 2019 North Carolina rate cases, in deciding the issue on remand. On January 22, 2021, Duke Energy Carolinas and Duke Energy Progress entered into the CCR Settlement Agreement with the Settling Parties, which was filed with the NCUC on January 25, 2021. For information on a proposed settlement pending before the NCUC, see "2021 Coal Ash Settlement." Duke Energy Carolinas cannot predict the outcome of this matter.

2019 North Carolina Rate Case

On September 30, 2019, Duke Energy Carolinas filed an application with the NCUC for a net rate increase for retail customers of approximately $291 million, which represented an approximate 6% increase in annual base revenues. The gross rate case revenue increase request was $445 million, which was offset by an EDIT rider of $154 million to return to customers North Carolina and federal EDIT resulting from recent reductions in corporate tax rates. The request for a rate increase was driven by major capital investments subsequent to the previous base rate case, coal ash pond closure costs, accelerated coal plant depreciation and deferred 2018 storm costs. Duke Energy Carolinas requested rates be effective no later than August 1, 2020. The NCUC established a procedural schedule with an evidentiary hearing to begin on March 23, 2020. On March 16, 2020, in consideration of public health and safety as a result of the COVID-19 pandemic, Duke Energy Carolinas filed a motion with the NCUC seeking a suspension of the procedural schedule in the rate case, including issuing discovery requests, and postponement of the evidentiary hearing for 60 days. Also on March 16, 2020, the NCUC issued an Order Postponing Hearing and Addressing Procedural Matters, which postponed the evidentiary hearing until further order by the Commission.

On March 25, 2020, Duke Energy Carolinas and the Public Staff filed an Agreement and Stipulation of Partial Settlement, which is subject to review and approval of the NCUC, resolving certain issues in the base rate proceeding. Major components of the settlement included:

- Removal of deferred storm costs from the rate case;
- Filing a petition seeking to securitize the deferred storm costs within 120 days of a commission order in this rate case regarding the reasonableness and prudency of the storm costs;
- Agreement of certain assumptions to demonstrate the quantifiable benefits to customers of a securitization financing; and
- Agreement on certain accounting matters, including recovery of employee incentives, severance, aviation costs and executive compensation.

On May 6, 2020, Duke Energy Carolinas, Duke Energy Progress and the Public Staff filed a joint motion requesting that the NCUC issue an order scheduling one consolidated evidentiary hearing to consider the companies' applications for net rate increases. On June 17, 2020, the NCUC issued an order adopting procedures for the expert witness hearings to take place in three phases: (1) a hearing on issues common to both rate cases conducted remotely; (2) a hearing on Duke Energy Carolinas specific rate case issues, followed immediately by; (3) a hearing on Duke Energy Progress specific rate case issues. On July 24, 2020, Duke Energy Carolinas filed its request for approval of its notice to customers required to implement temporary rates. On July 27, 2020, Duke Energy Carolinas filed a joint motion with Duke Energy Progress and the Public Staff notifying the Commission that the parties reached a joint partial settlement with the Public Staff. Also, on July 27, 2020, Duke Energy Carolinas filed a letter stating that it intended to update its temporary rates calculation to reflect the terms of the partial settlement.

On July 31, 2020, Duke Energy Carolinas and the Public Staff filed a Second Agreement and Stipulation of Partial Settlement (Second Partial Settlement), which is subject to review and approval of the NCUC, resolving certain remaining issues in the base rate proceeding. Major components of the Second Partial Settlement included:

- A return on equity of 9.6% and a capital structure of 52% equity and 48% debt;
- Agreement on amortization over a five-year period for unprotected federal EDIT flowbacks to customers;
- Agreement on the inclusion of plant in service and other revenue requirement updates through May 31, 2020, subject to Public Staff review. Annual revenue requirement associated with the May 31 update is estimated at $45 million; and
- Settlement to allow the deferral of costs for certain grid projects placed in service between June 1, 2020, and December 31, 2022, totaling $0.8 billion.

The remaining items litigated at hearing included recovery of deferred coal ash compliance costs that are subject to asset retirement obligation accounting, implementation of new depreciation rates and the amortization period of the loss on the hydro station sale.

On August 4, 2020, Duke Energy Carolinas filed an amended motion for approval of its amended notice to customers, seeking to exercise its statutory right to implement temporary rates subject to refund on or after August 24, 2020. The revenue requirement to be recovered, subject to refund, through the temporary rates is based on and consistent with the base rate component of the Second Partial Settlement with the Public Staff and excludes the items to be litigated noted above. Duke Energy Carolinas will not begin the amortization or implementation of these items until a final order is issued in the rate case and new base rates are implemented. These items will also be excluded when determining whether a refund of amounts collected through these temporary rates is needed. In addition, Duke Energy Carolinas also seeks authorization to place a temporary decrement EDIT Rider into effect, concurrent with the temporary base rate change. The temporary rate changes are not final rates and remain subject to the NCUC's determination of the just and reasonable rates to be charged by Duke Energy Carolinas on a permanent basis. The NCUC approved the August 4, 2020 amended temporary rates motion on August 6, 2020, and temporary rates went into effect on August 24, 2020.

The Duke Energy Carolinas evidentiary hearing concluded on September 18, 2020, and post-hearing filings were made with the NCUC from all parties by November 4, 2020. On January 22, 2021, Duke Energy Carolinas and Duke Energy Progress entered into the CCR Settlement Agreement with the Settling Parties, which was filed with the NCUC on January 25, 2021. Duke Energy Carolinas expects the NCUC to issue an order on its net rate increase by the second quarter of 2021. For information on a proposed settlement pending before the NCUC, see "2021 Coal Ash Settlement." Duke Energy Carolinas cannot predict the outcome of this matter.

2018 South Carolina Rate Case

On November 8, 2018, Duke Energy Carolinas filed an application with the PSCSC for a rate increase for retail customers of approximately $168 million.

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

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

As a result of the order, revised customer rates were effective June 1, 2019. On May 31, 2019, Duke Energy Carolinas filed a Petition for Rehearing or Reconsideration of that order contending substantial rights of Duke Energy Carolinas were prejudiced by unlawful, arbitrary and capricious rulings by the PSCSC on certain issues presented in the proceeding. On June 19, 2019, the PSCSC issued a Directive denying Duke Energy Carolinas' request to rehear or reconsider the Commission's rulings on certain issues presented in the proceeding including coal ash remediation and disposal costs, return on equity and the recovery of a return on deferred operation and maintenance expenses. An order detailing the Commission's decision in the Directive was issued on October 18, 2019. Duke Energy Carolinas filed a notice of appeal on November 15, 2019, with the Supreme Court of South Carolina. On November 20, 2019, the South Carolina Energy Users Committee filed a Notice of Appeal and the ORS filed a Notice of Cross Appeal with the Supreme Court of South Carolina. On February 12, 2020, Duke Energy Carolinas and the ORS filed a joint motion to extend briefing schedule deadlines, which was approved by the Supreme Court of South Carolina on February 20, 2020. On March 10, 2020, the ORS filed a consent motion requesting withdrawal of their appeal, which was granted by the Supreme Court of South Carolina on April 30, 2020. Initial briefs were filed on April 21, 2020, which included the South Carolina Energy User's Committee brief arguing that the PSCSC erred in allowing Duke Energy Carolinas' recovery of costs related to the Lee Nuclear Station. Response briefs were filed on July 6, 2020, and reply briefs were filed on August 11, 2020. Oral arguments have not yet been scheduled by the Supreme Court of South Carolina. Based on legal analysis and the filing of the appeal, Duke Energy Carolinas has not recorded an adjustment for its deferred coal ash costs in this matter. Duke Energy Carolinas cannot predict the outcome of this matter.

Duke Energy Progress

Regulatory Assets and Liabilities

The following tables present the regulatory assets and liabilities recorded on Duke Energy Progress' Consolidated Balance Sheets.

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	**2020**	**2019**	**a Return**	**Period Ends**
Regulatory Assets[a]				
AROs – coal ash	**$ 1,347**	$ 1,834	[h]	[b]
AROs – nuclear and other	**683**	509		[c]
Accrued pension and OPEB	**393**	423		[k]
Storm cost deferrals[d]	**785**	801	Yes	[b]
Retired generation facilities	**189**	83	Yes	[b]
PISCC and deferred operating expenses	**51**	33	Yes	2054
Deferred asset – Harris COLA	**32**	38		[b]
Hedge costs deferrals	**89**	85		[b]
AMI	**57**	61	Yes	[b]
DSM/EE[e]	**224**	216	[i]	[i]
Vacation accrual	**42**	41		2021
Deferred fuel and purchased power	**158**	266	[f]	2022
COR settlement	**33**	35	Yes	[e]
NCEMPA deferrals	**124**	72	[g]	2042
Nuclear deferral	**35**	40		2022
Customer connect project	**25**	17	Yes	[b]
ABSAT, coal ash basin closure	**27**	15	Yes	[b]
Deferred severance charges	**29**	—		2022
Incremental COVID-19 expenses	**23**	—	Yes	[b]
Other	**122**	109		[b]
Total regulatory assets	**4,468**	4,678		
Less: current portion	**492**	526		
Total noncurrent regulatory assets	**$ 3,976**	$ 4,152		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes[l]	**$ 1,662**	$ 1,802		[b]
Costs of removal	**2,666**	2,294	Yes	[j]
Provision for rate refunds	**123**	123	Yes	
Other	**473**	249		[b]
Total regulatory liabilities	**4,924**	4,468		
Less: current portion	**530**	236		
Total noncurrent regulatory liabilities	**$ 4,394**	$ 4,232		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Recovery period for costs related to nuclear facilities runs through the decommissioning period of each unit.
(d) South Carolina storm costs are included in rate base.
(e) Included in rate base.
(f) Pays interest on over-recovered costs in North Carolina. Includes certain purchased power costs in North Carolina and South Carolina and costs of distributed energy in South Carolina.
(g) South Carolina retail allocated costs are earning a return.
(h) Earns a debt and equity return on coal ash expenditures for North Carolina and South Carolina retail customers as permitted by various regulatory orders.
(i) Includes incentives on DSM/EE investments and is recovered through an annual rider mechanism.
(j) Recovered over the life of the associated assets.
(k) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.
(l) Includes regulatory liabilities related to the change in the federal tax rate as a result of the Tax Act and the change in the North Carolina tax rate, both discussed in Note 23. Portions are included in rate base.

2017 North Carolina Rate Case

On June 1, 2017, Duke Energy Progress filed an application with the NCUC for a rate increase for retail customers of approximately $477 million, which was subsequently adjusted to $420 million. On November 22, 2017, Duke Energy Progress and the Public Staff filed an Agreement and Stipulation of Partial Settlement resolving certain portions of the proceeding. Terms of the settlement included a return on equity of 9.9% and a capital structure of 52% equity and 48% debt. On February 23, 2018, the NCUC issued an order approving the stipulation. The order also impacted certain amounts that were similarly recorded on Duke Energy Carolinas' Consolidated Balance Sheets. As a result of the order, Duke Energy Progress and Duke Energy Carolinas recorded pretax charges of $68 million and $14 million, respectively, in the first quarter of 2018 to Impairment charges, Operation, maintenance and other and Interest Expense on the Consolidated Statements of Operations. The Public Staff, the North Carolina Attorney General and the Sierra Club filed notices of appeal to the North Carolina Supreme Court.

The North Carolina Supreme Court consolidated the Duke Energy Carolinas and Duke Energy Progress appeals. On December 11, 2020, the North Carolina Supreme Court issued an opinion on the consolidated appeals of the 2018 Duke Energy Carolinas and Duke Energy Progress rate case orders which affirmed, in part, and reversed and remanded, in part, the NCUC's decisions. In the Opinion, the court upheld the NCUC's decision to include coal ash costs in the cost of service, as well as the NCUC's discretion to allow a return on the unamortized balance of coal ash costs. The court also remanded to the NCUC a single issue to consider the assessment of support for the Public Staff's equitable sharing argument. In response to a NCUC order seeking comments on the proposed procedure on remand, on January 11, 2021, Duke Energy Carolinas, Duke Energy Progress, the Public Staff, the North Carolina Attorney General, Sierra Club and Carolina Industrial Group for Fair Utility Rates II and III filed joint comments proposing that the NCUC not hold additional evidentiary hearings, but instead rely upon existing records in the 2017 North Carolina rate cases or in the alternative the records in the 2019 North Carolina rate cases, in deciding the issue on remand. On January 22, 2021, Duke Energy Progress and Duke Energy Carolinas entered into the CCR Settlement Agreement with the Settling Parties, which was filed with the NCUC on January 25, 2021. For information on the proposed settlement pending before the NCUC, see "2021 Coal Ash Settlement." Duke Energy Progress cannot predict the outcome of this matter.

2019 North Carolina Rate Case

On October 30, 2019, Duke Energy Progress filed an application with the NCUC for a net rate increase for retail customers of approximately $464 million, which represented an approximate 12.3% increase in annual base revenues. The gross rate case revenue increase request was $586 million, which was offset by riders of $122 million, primarily an EDIT rider of $120 million to return to customers North Carolina and federal EDIT resulting from recent reductions in corporate tax rates. The request for rate increase was driven by major capital investments subsequent to the previous base rate case, coal ash pond closure costs, accelerated coal plant depreciation and deferred 2018 storm costs. Duke Energy Progress seeks to defer and recover incremental Hurricane Dorian storm costs in this proceeding and requests rates be effective no later than September 1, 2020. As a result of the COVID-19 pandemic, on March 24, 2020, the NCUC suspended the procedural schedule and postponed the previously scheduled evidentiary hearing on this matter indefinitely. On April 7, 2020, the NCUC issued an order partially resuming the procedural schedule requiring intervenors to file direct testimony on April 13, 2020. Public Staff filed supplemental direct testimony on April 23, 2020. Duke Energy Progress filed rebuttal testimony on May 4, 2020.

On June 2, 2020, Duke Energy Progress and the Public Staff filed an Agreement and Stipulation of Partial Settlement, which is subject to review and approval of the NCUC, resolving certain issues in the base rate proceeding. Major components of the settlement included:

- Removal of deferred storm costs from the rate case;
- Filing a petition seeking to securitize the deferred storm costs within 120 days of a commission order in this rate case regarding the reasonableness and prudency of the storm costs;
- Agreement of certain assumptions to demonstrate the quantifiable benefits to customers of a securitization financing;
- Agreement that the Asheville CC project is complete and in service and agreement on the amount to be included in rate base; and
- Agreement on certain accounting matters, including recovery of employee incentives, severance, aviation costs and executive compensation.

On May 6, 2020, Duke Energy Progress, Duke Energy Carolinas and the Public Staff filed a joint motion requesting that the NCUC issue an order scheduling one consolidated evidentiary hearing to consider the companies' applications for net rate increases. On June 17, 2020, the NCUC issued an order adopting procedures for the expert witness hearings to take place in three phases: (1) a hearing on issues common to both rate cases conducted remotely; (2) a hearing on Duke Energy Carolinas specific rate case issues, followed immediately by; (3) a hearing on Duke Energy Progress specific rate case issues. On July 27, 2020, Duke Energy Progress filed a joint motion with Duke Energy Carolinas and the Public Staff notifying the Commission that the parties reached a joint partial settlement with the Public Staff.

On July 31, 2020, Duke Energy Progress and the Public Staff filed a Second Agreement and Stipulation of Partial Settlement (Second Partial Settlement), which is subject to review and approval of the NCUC, resolving certain remaining issues in the base rate proceeding. Major components of the Second Partial Settlement included:

- A return on equity of 9.6% and a capital structure of 52% equity and 48% debt;
- Agreement on amortization over a five-year period for unprotected federal EDIT flowbacks to customers;
- Agreement on the inclusion of plant in service and other revenue requirement updates through May 31, 2020, subject to Public Staff review. Annual revenue requirement associated with the May 31 update is estimated at $25 million; and
- Settlement to allow the deferral of costs for certain grid projects placed in service between June 1, 2020, and December 31, 2022, of $0.5 billion.

The remaining items litigated at hearing included recovery of deferred coal ash compliance costs that are subject to asset retirement obligation accounting and implementation of new depreciation rates.

On August 7, 2020, Duke Energy Progress filed a motion for approval of notice required to implement temporary rates, seeking to exercise its statutory right to implement temporary rates subject to refund on or after September 1, 2020. The revenue requirement to be recovered subject to refund through the temporary rates is based on and consistent with the terms of the base rate component of the settlement agreements with the Public Staff and excludes items to be litigated noted above. Duke Energy Progress will not begin the amortization or implementation of these items until a final determination is issued in the rate case and new base rates are implemented. These items will also be excluded when determining whether a refund of amounts collected through these temporary rates is needed. In addition, Duke Energy Progress also seeks authorization to place a temporary decrement EDIT Rider into effect, concurrent with the temporary base rate change. The temporary rate changes are not final rates and remain subject to the NCUC's determination of the just and reasonable rates to be charged by Duke Energy Progress on a permanent basis. The NCUC approved the August 7, 2020 temporary rates motion on August 11, 2020, and temporary rates went into effect on September 1, 2020.

The Duke Energy Progress evidentiary hearing concluded on October 6, 2020, and post-hearing filings were filed with the NCUC from all parties by December 4, 2020. On January 22, 2021, Duke Energy Progress and Duke Energy Carolinas entered into the CCR Settlement Agreement with the Settling Parties, which was filed with the NCUC on January 25, 2021. Duke Energy Progress expects the NCUC to issue an order on its net rate increase by the second quarter of 2021. For information on a proposed settlement pending before the NCUC, see "2021 Coal Ash Settlement." Duke Energy Progress cannot predict the outcome of this matter.

Hurricane Dorian

Hurricane Dorian reached the Carolinas in September 2019 as a Category 2 hurricane making landfall within Duke Energy Progress' service territory. Total estimated incremental operation and maintenance expenses incurred to repair and restore the system are approximately $168 million with an additional $4 million in capital investments made for restoration efforts. Approximately $145 million and $179 million of the operation and maintenance expenses are deferred in Regulatory assets within Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2020, and December 31, 2019, respectively. A request for an accounting order to defer incremental storm costs associated with Hurricane Dorian was included in Duke Energy Progress' October 30, 2019, general rate case filing with the NCUC. Terms of the June 2, 2020, Agreement and Stipulation of Partial Settlement removed incremental storm costs from the general rate case. A petition seeking to securitize these costs, along with costs from Hurricane Florence, Hurricane Michael and Winter Storm Diego, was filed on October 26, 2020, with the NCUC. For information on the securitization filing, see "2020 North Carolina Storm Securitization Filings." Duke Energy Progress cannot predict the outcome of this matter.

On February 7, 2020, a petition was filed with the PSCSC in the 2019 storm deferrals docket requesting deferral of approximately $22 million in operation and maintenance expenses to an existing storm deferral balance previously approved by the PSCSC. The PSCSC voted to approve the request on March 4, 2020, and issued a final order on April 7, 2020. On July 1, 2020, Duke Energy Progress filed a supplemental true up reducing the actual costs to $17 million.

2018 South Carolina Rate Case

On November 8, 2018, Duke Energy Progress filed an application with the PSCSC for a rate increase for retail customers of approximately $59 million.

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

- Approval of recovery of $4 million of coal ash costs over a five-year period with a return at Duke Energy Progress' WACC;
- Denial of recovery of $65 million of certain coal ash costs deemed to be related to the Coal Ash Act and incremental to the federal CCR rule;
- Approval of a $17 million decrease to base rates to reflect the change in ongoing tax expense, primarily the reduction in the federal income tax rate from 35% to 21%;
- Approval of a $12 million decrease through the EDIT Tax Savings Rider resulting from the federal tax rate change and deferred revenues since January 2018 related to the change, to be returned in accordance with ARAM for protected EDIT, over a 20-year period for unprotected EDIT associated with Property, Plant and Equipment, over a five-year period for unprotected EDIT not associated with Property, Plant and Equipment and over a three-year period for the deferred revenues; and
- Approval of a $12 million increase due to the expiration of EDIT related to reductions in the North Carolina state income tax rate from 6.9% to 2.5%.

As a result of the order, revised customer rates were effective June 1, 2019. On May 31, 2019, Duke Energy Progress filed a Petition for Rehearing or Reconsideration of that order contending substantial rights of Duke Energy Progress were prejudiced by unlawful, arbitrary and capricious rulings by the PSCSC on certain issues presented in the proceeding. On June 19, 2019, the PSCSC issued a Directive denying Duke Energy Progress' request to rehear or reconsider the Commission's rulings on certain issues presented in the proceeding including coal ash remediation and disposal costs, return on equity and the recovery of a return on deferred operation and maintenance expenses, but allowing additional litigation-related costs. As a result of the Directive allowing litigation-related costs, customer rates were revised effective July 1, 2019. An order detailing the Commission's decision in the Directive was issued on October 18, 2019. Duke Energy Progress filed a notice of appeal on November 15, 2019, with the Supreme Court of South Carolina. The ORS filed a Notice of Cross Appeal on November 20, 2019. On February 12, 2020, Duke Energy Progress and the ORS filed a joint motion to extend briefing schedule deadlines, which was approved by the Supreme Court of South Carolina on February 20, 2020. On March 10, 2020, the ORS filed a consent motion requesting withdrawal of their appeal, which was granted by the Supreme Court of South Carolina on April 30, 2020. Initial briefs were filed on April 21, 2020. Response briefs were filed on July 6, 2020, and reply briefs were filed on August 11, 2020. Oral arguments have not yet been scheduled by the Supreme Court of South Carolina. Based on legal analysis and the filing of the appeal, Duke Energy Progress has not recorded an adjustment for its deferred coal ash costs in this matter. Duke Energy Progress cannot predict the outcome of this matter.

Western Carolinas Modernization Plan

Duke Energy Progress retired the 376-MW Asheville coal-fired plant on January 29, 2020, at which time the net book value, including associated ash basin closure costs, of $214 million was transferred from Generation facilities to be retired, net to Regulatory assets within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets.

On December 27, 2019, Asheville Combined Cycle Unit 5 Combustion Turbine and Unit 6 Steam Turbine Generator and the common systems that serve combined cycle units went into commercial operation. Duke Energy Progress placed the Unit 7 Combustion Turbine into commercial operation in simple-cycle mode on January 15, 2020. The Unit 8 Steam Turbine Generator went into commercial operation on April 5, 2020. On June 2, 2020, Duke Energy Progress filed a request with the PSCSC for an accounting order for the deferral of post-in-service costs incurred in connection with the addition of the Asheville combined-cycle generating plant. The petition requested the PSCSC issue an accounting order authorizing Duke Energy Progress to defer post-in-service costs including the Asheville combined-cycle's depreciation expense, property taxes, incremental operations and maintenance expenses and carrying costs at WACC of approximately $8 million annually. On June 17, 2020, the PSCSC voted to approve the petition and issued its final order on July 6, 2020.

On October 8, 2018, Duke Energy Progress filed an application with the NCUC for a CPCN to construct the Hot Springs Microgrid Solar and Battery Storage Facility, which was approved with certain conditions on May 10, 2019. A hearing to update the NCUC on the status of the project was held on March 5, 2020. Construction began in May 2020 with commercial operation expected to begin in October 2021.

On July 27, 2020, Duke Energy Progress filed an application with the NCUC for a CPCN to construct the Woodfin Solar Facility, a 5-MW solar generating facility to be constructed on a closed landfill in Buncombe County. The expert hearing was held on November 18, 2020. Duke Energy Progress cannot predict the outcome of this matter.

FERC Return on Equity Complaints

On October 11, 2019, NCEMPA filed a complaint at the FERC against Duke Energy Progress pursuant to Section 206 of the Federal Power Act (FPA), alleging that the 11% stated return on equity (ROE) component contained in the demand formula rate in the Full Requirements Power Purchase Agreement (FRPPA) between NCEMPA and Duke Energy Progress is unjust and unreasonable. On July 16, 2020, the FERC set this matter for hearing and settlement judge procedures and established a refund effective date of October 11, 2019. In its order setting the matter for settlement, the FERC allowed for the consideration of variations to the base transmission-related ROE methodology developed in its Order No. 569-A, through the introduction of "specific facts and circumstances" involving issues specific to the case. It is Duke Energy Progress' view that, in consideration of the specific facts and circumstances of risks under the provisions of the FRPPA, the stated 11% ROE is just and reasonable. The parties are currently in FERC settlement procedures. Duke Energy Progress cannot predict the outcome of this matter.

On October 16, 2020, NCEMC filed a complaint at the FERC against Duke Energy Progress pursuant to Section 206 of the FPA, alleging that the 11% stated ROE component in the demand formula rate in the Power Supply and Coordination Agreement between NCEMC and Duke Energy Progress is unjust and unreasonable. Under FPA Section 206, the earliest refund effective date that the FERC can establish is the date of the filing of the complaint. Duke Energy Progress responded to the complaint on November 20, 2020, demonstrating that the 11% ROE is just and reasonable for the service provided. The parties have filed additional pleadings. The FERC has not issued an order, and there is no deadline for the FERC to act. Duke Energy Progress cannot predict the outcome of this matter.

Duke Energy Florida

Regulatory Assets and Liabilities

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

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	**2020**	**2019**	**a Return**	**Period Ends**
Regulatory Assets[(a)]				
AROs – coal ash[(c)]	$ 10	$ 9		(b)
AROs – nuclear and other[(c)]	2	159	Yes	(b)
Accrued pension and OPEB[(c)]	482	474	Yes	(g)
Storm cost deferrals[(c)]	108	413	(e)	(b)
Nuclear asset securitized balance, net	991	1,042		2036
Retired generation facilities[(c)]	174	183	Yes	(b)
Hedge costs deferrals	59	44	Yes	2038
AMI[(c)]	45	53	Yes	2032
DSM/EE[(c)]	17	25	Yes	2025
Deferred fuel and purchased power	4	39	(f)	2022
Qualifying facility contract buyouts	107	121	Yes	2034
Customer connect project	30	20		2037
Other	35	31	(d)	(b)
Total regulatory assets	2,064	2,613		
Less: current portion	265	419		
Total noncurrent regulatory assets	$ 1,799	$ 2,194		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes[(c)]	$ 749	$ 793		(b)
Costs of removal[(c)]	—	267	(d)	(b)
Deferred fuel and purchased power[(c)]	—	1	(f)	
Other	19	26	(d)	(b)
Total regulatory liabilities	768	1,087		
Less: current portion	110	94		
Total noncurrent regulatory liabilities	$ 658	$ 993		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Certain costs earn/pay a return.
(e) Earns a debt return/interest once collections begin.
(f) Earns commercial paper rate.
(g) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

COVID-19 Filings

In March 2020, Governor Ron DeSantis directed the State Health Officer of Florida to declare a public health emergency in Florida related to the COVID-19 pandemic. The governor also issued an Executive Order on March 9, 2020, in which he declared a state of emergency in Florida and directed the Director of the Division of Emergency Management to implement the state's Comprehensive Emergency Management Plan. On March 19, 2020, Duke Energy Florida filed a request to modify its tariff to allow it to waive late fees for customers, and on April 6, 2020, the FPSC issued an order approving the request. Duke Energy Florida had already voluntarily waived reconnect fees and credit card fees and ceased disconnecting customers for nonpayment. On April 2, 2020, Duke Energy Florida filed a petition with the FPSC to accelerate a $73 million fuel cost refund to customers in the month of May 2020. Typically, the refund would be made over the course of 2021. The FPSC approved the petition on April 28, 2020. Duke Energy Florida resumed normal billing practices as of August 24, 2020, with the exception of the billing of late payment charges. Customers were notified of the resumption of normal billing practices, the option of deferred payment arrangements and where to find assistance, if necessary. Service disconnections for nonpayment for residential customers resumed on October 5, 2020.

2021 Settlement Agreement

On January 14, 2021, Duke Energy Florida filed a Settlement Agreement (the "Settlement") with the FPSC. The parties to the Settlement include Duke Energy Florida, the Office of Public Counsel (OPC), the Florida Industrial Power Users Group, White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate and NUCOR Steel Florida, Inc. (collectively, the "Parties").

Pursuant to the Settlement, the Parties agreed to a base rate stay-out provision that expires year-end 2024; however, Duke Energy Florida is allowed an increase to its base rates of an incremental $67 million in 2022, $49 million in 2023 and $79 million in 2024, subject to adjustment in the event of tax reform during the years 2021, 2022 and 2023. The Parties also agreed to a return on equity ("ROE") band of 8.85% to 10.85% with a midpoint of 9.85% based on a capital structure of 53% equity and 47% debt. The ROE band can be increased by 25 basis points if the average 30-year U.S. Treasury rate increases 50 basis points or more over a six-month period in which case the midpoint ROE would rise from 9.85% to 10.10%. Duke Energy Florida will also be able to retain the DOE award of $173 million for spent nuclear fuel, which is expected to be received in 2022, in order to mitigate customer rates over the term of the Settlement. In return, Duke Energy Florida will be able to recognize the $173 million into earnings from 2022 through 2024.

In addition to these terms, the Settlement contains provisions related to the accelerated depreciation of Crystal River Units 4-5, the approval of approximately $1 billion in future investments in new cost effective solar power, the implementation of a new Electric Vehicle Charging Station Program and the deferral and recovery of costs in connection with the implementation of Duke Energy Florida's Vision Florida program, which explores various emerging non-carbon emitting generation technology, distributed technologies and resiliency projects, among other things. The Settlement also resolves remaining unrecovered storm costs for hurricanes Dorian and Michael.

The Settlement is subject to the review and approval of the FPSC, which may occur in the second quarter of 2021. If the FPSC approves the Settlement, the new rates will be effective January 1, 2022, with subsequent base rate increases effective January 1, 2023, and January 1, 2024. Duke Energy Florida cannot predict the outcome of this matter.

Storm Restoration Cost Recovery

Duke Energy Florida filed a petition with the FPSC on April 30, 2019, to recover $223 million of estimated retail incremental storm restoration costs for Hurricane Michael, consistent with the provisions in the 2017 Settlement, and the FPSC approved the petition on June 11, 2019. The FPSC also approved allowing Duke Energy Florida to use the tax savings resulting from the Tax Act to recover these storm costs in lieu of implementing a storm surcharge. Approved storm costs are currently expected to be fully recovered by approximately year-end 2021. On November 22, 2019, Duke Energy Florida filed a petition for approval of actual retail recoverable storm restoration costs related to Hurricane Michael in the amount of $191 million plus interest. On May 19, 2020, Duke Energy Florida filed a supplemental true up reducing the actual retail recoverable storm restoration costs related to Hurricane Michael by approximately $3 million, resulting in a total request to recover $188 million actual retail recoverable storm restoration costs, plus interest. On November 12, 2020, Duke Energy Florida and OPC requested a 90 day abatement to engage in discussions to narrow the issues being litigated. The Prehearing Officer approved this request on November 16, 2020, and ordered Duke Energy Florida and OPC to update the commission on their discussions by February 12, 2021. Approximately $80 million and $204 million of these costs are included in Regulatory assets within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2020, and December 31, 2019, respectively.

Duke Energy Florida filed a petition with the FPSC on December 19, 2019, to recover $169 million of estimated retail incremental storm restoration costs for Hurricane Dorian, consistent with the provisions in the 2017 Settlement and the FPSC approved the petition on February 24, 2020. Approximately $167 million of these costs are included in Regulatory assets within Current Assets and Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2019, representing recoverable costs under the FPSC's storm rule and Duke Energy Florida's OATT formula rates. The amount at December 31, 2020 was immaterial. The final actual amount of $145 million was filed on September 30, 2020. Pursuant to the 2021 Settlement Agreement filed for FPSC approval on January 14, 2021, all matters regarding storm cost recovery relating to hurricanes Michael and Dorian have been resolved.

Clean Energy Connection

On July 1, 2020, Duke Energy Florida petitioned the FPSC for approval of a voluntary solar program. The program consists of 10 new solar generating facilities with combined capacity of approximately 750 MW. The program allows participants to support cost-effective solar development in Florida by paying a subscription fee based on per kilowatt-subscriptions and receiving a credit on their bill based on the actual generation associated with their portion of the solar portfolio. The estimated cost of the 10 new solar generation facilities is approximately $1 billion over the next four years, and this investment will be included in base rates offset by the revenue from the subscription fees. The credits will be included for recovery in the fuel cost recovery clause. A remote hearing was held on November 17, 2020, and post-hearing briefs were filed with the FPSC from all parties by December 9, 2020. The FPSC voted to approve the program on January 5, 2021, and issued its written order on January 26, 2021.

Crystal River Unit 3 Accelerated Decommissioning Filing

On May 29, 2019, Duke Energy Florida entered into a Decommissioning Services Agreement for the accelerated decommissioning of Crystal River Unit 3 located in Citrus County, Florida, with ADP CR3, LLC and ADP SF1, LLC, each of which is a wholly owned subsidiary of Accelerated Decommissioning Partners, LLC (ADP), a joint venture between NorthStar Group Services, Inc. and Orano USA LLC. The agreement will allow for completion of the decommissioning of Crystal River Unit 3 by 2027, rather than 2074 as originally planned. Duke Energy Florida will also sell and assign the spent nuclear fuel, storage canisters, high-level waste and existing dry spent fuel storage installation and certain related assets, together with certain associated liabilities and obligations to ADP SF1, LLC. Duke Energy Florida expects that the assets of the Nuclear Decommissioning Trust Fund as of December 31, 2020, will be sufficient to cover the contract price. The U.S. Nuclear Regulatory Commission approved the transaction on April 1, 2020, and the FPSC issued an order approving the transaction on August 27, 2020. The transaction closed on October 1, 2020.

Citrus County CC

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

Duke Energy Ohio

Regulatory Assets and Liabilities

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

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	**2020**	**2019**	**a Return**	**Period Ends**
Regulatory Assets[(a)]				
AROs – coal ash	**$ 22**	$ 16	Yes	(b)
Accrued pension and OPEB	**149**	155		(g)
Storm cost deferrals	**4**	7		2023
PISCC and deferred operating expenses[(c)]	**16**	17	Yes	2083
Hedge costs deferrals	**7**	6		(b)
AMI	**36**	40		(b)
DSM/EE	**1**	2	(f)	(e)
Vacation accrual	**6**	5		2021
Deferred fuel and purchased power	**—**	1		2021
CEP deferral	**117**	76	Yes	(b)
MGP	**104**	102		(b)
Deferred pipeline integrity costs	**21**	17	Yes	(b)
Other	**166**	154		(b)
Total regulatory assets	**649**	598		
Less: current portion	**39**	49		
Total noncurrent regulatory assets	**$ 610**	$ 549		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes	**$ 628**	$ 654		(b)
Costs of removal	**68**	86		(d)
Provision for rate refunds	**45**	31		(b)
Accrued pension and OPEB	**17**	16		(g)
Other	**55**	40		(b)
Total regulatory liabilities	**813**	827		
Less: current portion	**65**	64		
Total noncurrent regulatory liabilities	**$ 748**	$ 763		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Recovery over the life of the associated assets.
(e) Recovered via a rider mechanism.
(f) Includes incentives on DSM/EE investments.
(g) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

Duke Energy Ohio COVID-19 Filings

In response to the COVID-19 pandemic, on March 9, 2020, Governor Mike DeWine declared a state of emergency in the state of Ohio. The PUCO issued an order directing utilities to cease disconnections for nonpayment and waive late payment and reconnection fees and to minimize direct customer contact. The PUCO also directed utilities to maintain flexible payment plans and tariff interpretations to assist customers during this crisis and to seek any regulatory waivers, if necessary. In response, Duke Energy Ohio ceased all disconnections except for safety-related concerns and waived late payment and reconnection fees. On March 19, 2020, Duke Energy Ohio filed its compliance plan with the PUCO and sought waiver of several regulations to minimize direct customer contact. On May 4, 2020, Duke Energy Ohio filed a motion to suspend payment rules to enable proactive outreach to residential customers offering additional options for managing their utility bills. PUCO found the proposal to address the state of emergency and the accompanying waivers reasonable and directed Duke Energy Ohio to work with the PUCO Staff on a comprehensive plan for resumption of activities and operations, to be filed 45 days before resumption of activities. The transition plan to resume normal operations to pre-COVID-19 levels was filed on June 26, 2020, and approved by the PUCO on July 29, 2020. Pursuant to the transition plan, suspended work and activities resumed beginning August 10, 2020, and disconnections resumed on September 8, 2020, for nonresidential customers and October 5, 2020, for residential customers.

On April 16, 2020, Duke Energy Ohio filed an application for a Reasonable Arrangement to temporarily lower the minimum bill for demand-metered commercial and industrial customers. On June 17, 2020, the PUCO denied Duke Energy Ohio's application for a reasonable arrangement and ordered Duke Energy Ohio to work with the PUCO Staff on payment arrangements for impacted nonresidential customers.

On May 11, 2020, Duke Energy Ohio filed with the PUCO a request seeking deferral of incremental costs incurred, as well as specific miscellaneous lost revenues using existing uncollectible riders already in place for both electric and natural gas operations. Duke Energy Ohio would subsequently file for rider recovery at a later date. On June 17, 2020, the PUCO approved Duke Energy Ohio's deferral application. The Commission denied the accrual of carrying costs and ordered Duke Energy Ohio to also track potential savings experienced as a result of COVID-19.

Duke Energy Kentucky COVID-19

In response to the COVID-19 pandemic, on March 6, 2020, Governor Andy Beshear declared a state of emergency in the commonwealth of Kentucky. The KPSC issued an order directing utilities to cease disconnections for nonpayment and waive late payment fees. The KPSC also directed utilities to maintain flexible payment plans and tariff interpretations to assist customers during this crisis and to seek any regulatory waivers, if necessary. In response, Duke Energy Kentucky ceased all disconnections except for safety-related concerns and waived late payment and reconnection fees. On September 21, 2020, the KPSC issued an order ending the disconnection moratorium for residential and nonresidential customers effective no earlier than October 20, 2020. Utilities are required to offer residential customers a default payment plan for any arrearages accumulated through the October 2020 billing cycle. Assessment of late payment charges for nonresidential customers resumed beginning October 20, 2020, and resumed for residential customers after December 31, 2020. Duke Energy Kentucky is following the order, as clarified on September 30, 2020, by the KPSC.

2017 Electric Security Plan Filing

On June 1, 2017, Duke Energy Ohio filed with the PUCO a request for a standard service offer in the form of an ESP. On April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed a Stipulation and Recommendation (Stipulation) with the PUCO resolving that the term of the ESP would be from June 1, 2018, to May 31, 2025, and included continuation of market-based customer rates through competitive procurement processes for generation, continuation and expansion of existing rider mechanisms and approved new rider mechanisms relating to costs incurred to enhance the customer experience and transform the grid and a service reliability rider for vegetation management. On September 13, 2019, and September 16, 2019, Interstate Gas Supply/Retail Supply Association and the Ohio Consumers' Counsel (OCC), respectively, filed appeals to the Supreme Court of Ohio claiming the PUCO's order was in error. On March 13, 2020, the Supreme Court of Ohio dismissed OCC's appeal. On April 22, 2020, the Supreme Court of Ohio dismissed all remaining appeals of the PUCO's December 19, 2018 order approving the Stipulation. The case has been resolved.

Electric Base Rate Case

Duke Energy Ohio filed with the PUCO an electric distribution base rate case application and supporting testimony in March 2017. Duke Energy Ohio requested an estimated annual increase of approximately $15 million and a return on equity of 10.4%. On April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed the Stipulation with the PUCO including a $19 million decrease in annual base distribution revenue with a return on equity unchanged from the current rate of 9.84% based upon a capital structure of 50.75% equity and 49.25% debt. Upon approval of new rates, Duke Energy Ohio's rider for recovering its initial SmartGrid implementation ended as these costs would be recovered through base rates. The Stipulation also renewed 14 existing riders, some of which were included in Duke Energy Ohio's ESP, and added two new riders including the Enhanced Service Reliability Rider to recover vegetation management costs not included in base rates, up to $10 million per year (operation and maintenance only) and the Power Future Initiatives Rider (formerly PowerForward Rider) to recover costs incurred to enhance the customer experience and further transform the grid (operation and maintenance and capital). In addition to the changes in revenue attributable to the Stipulation, Duke Energy Ohio's capital-related riders, including the Distribution Capital Investments Rider, began to reflect the lower federal income tax rate associated with the Tax Act with updates to customers' bills beginning April 1, 2018. This change reduced electric revenue by approximately $20 million on an annualized basis. On December 19, 2018, the PUCO approved the Stipulation without material modification. New base rates were implemented effective January 2, 2019. On September 13, 2019, and September 16, 2019, Interstate Gas Supply/Retail Supply Association and the OCC, respectively, filed appeals to the Supreme Court of Ohio claiming the PUCO's order was in error. On March 13, 2020, the Supreme Court of Ohio dismissed the OCC's appeal. On April 22, 2020, the Supreme Court of Ohio dismissed all remaining appeals of the PUCO's December 19, 2018 order approving the Stipulation. The case has been resolved.

Ohio Valley Electric Corporation

On March 31, 2017, Duke Energy Ohio filed for approval to adjust its existing Rider PSR to pass through net costs related to its contractual entitlement to capacity and energy from the generating assets owned by OVEC.

Duke Energy Ohio sought deferral authority for net costs incurred from April 1, 2017, until the new rates under Rider PSR were put into effect. On April 13, 2018, Duke Energy Ohio, along with certain intervenors, filed a Stipulation with the PUCO resolving numerous issues including those related to Rider PSR. The Stipulation activated Rider PSR for recovery of net costs incurred from January 1, 2018, through May 2025. On December 19, 2018, the PUCO approved the Stipulation without material modification. The PSR rider became effective April 1, 2019. On September 13, 2019, and September 16, 2019, Interstate Gas Supply/Retail Supply Association and the OCC filed appeals to the Supreme Court of Ohio claiming the PUCO's order was in error. On March 13, 2020, the Supreme Court of Ohio dismissed OCC's appeal. On April 22, 2020, the Supreme Court of Ohio dismissed all remaining appeals of the PUCO's December 19, 2018 order approving the Stipulation. The case has been resolved.

On July 23, 2019, House Bill 6 (HB 6) was signed into law that became effective January 1, 2020. Among other things, the bill allows for funding through a rider mechanism referred to as the Clean Air Fund (Rider CAF), of two nuclear generating facilities located in Northern Ohio owned by Energy Harbor (f/k/a FirstEnergy Solutions), repeal of energy efficiency mandates and recovery of prudently incurred costs, net of any revenues, for Ohio investor-owned utilities that are participants under the OVEC power agreement. The recovery is through a non-bypassable rider that replaced any existing recovery mechanism approved by the PUCO and will remain in place through 2030. As such, Duke Energy Ohio created the Legacy Generation Rider (Rider LGR) that replaced Rider PSR effective January 1, 2020. The amounts recoverable from customers are subject to an annual cap, with incremental costs that exceed such cap eligible for deferral and recovery subject to review. See Note 17 for additional discussion of Duke Energy Ohio's ownership interest in OVEC. In July 2020, legislation to repeal HB 6 was proposed in both the Ohio House and Senate, with subsequent hearings to receive witness testimony. On December 21, 2020, the Franklin County Circuit Court issued an injunction against the PUCO's Order that approved the nuclear plant funding through Rider CAF set to become effective on January 1, 2021. On December 28, 2020, in a separate proceeding, the Ohio Supreme Court, ordered a temporary stay on the implementation of Rider CAF. Duke Energy Ohio is not impacted by any changes in Rider CAF. The General Assembly's session ended without addressing HB 6. Duke Energy Ohio cannot predict the outcome of this matter.

Tax Act – Ohio

On December 21, 2018, Duke Energy Ohio filed an application to change its base rate tariffs and establish a new rider to implement the benefits of the Tax Act for natural gas customers. Duke Energy Ohio requested commission approval to implement the changes and rider effective April 1, 2019. The new rider will flow through to customers the benefit of the lower statutory federal tax rate from 35% to 21% since January 1, 2018, all future benefits of the lower tax rates and a full refund of deferred income taxes collected at the higher tax rates in prior years. Deferred income taxes subject to normalization rules will be refunded consistent with federal law and deferred income taxes not subject to normalization rules will be refunded over a 10-year period. The PUCO established a procedural schedule and testimony was filed on July 31, 2019. An evidentiary hearing occurred on August 7, 2019. Initial briefs were filed on September 11, 2019. Reply briefs were filed on September 25, 2019. Duke Energy Ohio cannot predict the outcome of this matter.

Energy Efficiency Cost Recovery

On February 26, 2020, the PUCO issued an order directing utilities to wind down their demand-side management programs by September 30, 2020, and to terminate the programs by December 31, 2020, in response to changes in Ohio law that eliminated Ohio's energy efficiency mandates. On March 27, 2020, Duke Energy Ohio filed an Application for Rehearing seeking clarification on the final true up and reconciliation process after 2020. On April 22, 2020, the PUCO granted rehearing for further consideration. The PUCO issued two orders on November 18, 2020, on the application for rehearing. The first order was a Third Entry on Rehearing on the Duke Energy Ohio portfolio holding the cost cap previously imposed was unlawful, a shared savings cap of $8 million pretax should be imposed and lost distribution revenues could not be recovered after December 31, 2020. The second order directs all utilities set the rider to zero effective January 1, 2021, and to file a separate application for final reconciliation of all energy efficiency costs prior to December 31, 2020. On December 18, 2020, Duke Energy Ohio filed an application for rehearing. On January 13, 2021, the application for rehearing was granted for further consideration. Duke Energy Ohio cannot predict the outcome of this matter.

On October 9, 2020, Duke Energy Ohio filed an application to implement a voluntary efficiency program portfolio to commence on January 1, 2021. The application proposes a mechanism for recovery of program costs and a benefit associated with avoided transmission and distribution costs. The application remains under review. As of January 1, 2021, Duke Energy Ohio suspended its energy efficiency programs due to changes in Ohio law. Duke Energy Ohio cannot predict the outcome of this matter.

Natural Gas Pipeline Extension

Duke Energy Ohio is proposing to install a new natural gas pipeline (the Central Corridor Project) in its Ohio service territory to increase system reliability and enable the retirement of older infrastructure. Duke Energy Ohio currently estimates the pipeline development costs and construction activities will range from $163 million to $245 million in direct costs (excluding overheads and AFUDC) and that construction of the pipeline extension is expected to be completed before the 2021/2022 winter season. An evidentiary hearing for a Certificate of Environmental Compatibility and Public Need concluded on April 11, 2019. On November 21, 2019, the Ohio Power Siting Board (OPSB) approved Duke Energy Ohio's application subject to 41 conditions on construction. Applications for rehearing were filed by several stakeholders on December 23, 2019, arguing that the OPSB approval was incorrect. On February 20, 2020, the OPSB denied the rehearing requests. On April 15, 2020, Joint Appellants filed a notice of appeal at the Supreme Court of Ohio of the OPSB's decision approving Duke Energy Ohio's Central Corridor application. On June 4, 2020, the OPSB filed a motion to dismiss claims raised by one of the Joint Appellants and on August 5, 2020, the Supreme Court of Ohio dismissed one of the Joint Appellants from the appeal. Joint Appellants filed their merit briefs on August 26, 2020. Appellee briefs were filed October 15, 2020. Appellants' briefs were filed on November 24, 2020. On September 22, 2020, Duke Energy Ohio filed an application with the OPSB for approval to amend the certificated pipeline route due to changes in the route negotiated with property owners and municipalities. The staff report was filed on December 21, 2020, recommending approval subject to three conditions that reaffirm previous conditions, and provide guidance regarding local permitting and construction supervision. On December 23, 2020, Duke Energy Ohio filed a letter indicating its acceptance of these conditions if required by the OPSB. On January 21, 2021, the OPSB approved the amended filing with the recommended conditions. On January 27, 2021, the Ohio Supreme Court set oral argument for March 31, 2021. Duke Energy Ohio cannot predict the outcome of this matter.

MGP Cost Recovery

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

On March 31, 2020, Duke Energy Ohio filed its annual application to recover incremental remediation expense for the calendar year 2019 seeking recovery of approximately $39 million in remediation costs incurred during 2019. On July 23, 2020, the staff recommended a disallowance of approximately $4 million for work the staff believes occurred in areas not authorized for recovery. Additionally, the staff recommended insurance proceeds, net of litigation costs and attorney fees, should be reimbursed to customers and not be held by Duke Energy Ohio until all investigation and remediation is complete. Duke Energy Ohio filed comments in response to the staff report on August 21, 2020, and intervenor comments were filed on November 9, 2020. Duke Energy Ohio cannot predict the outcome of this matter.

The 2012 PUCO order also contained conditional deadlines for completing the MGP environmental remediation and the deferral of remediation costs at the MGP sites. Subsequent to the order, the deadline was extended to December 31, 2019. On May 10, 2019, Duke Energy Ohio filed an application requesting a continuation of its existing deferral authority for MGP remediation that must occur after December 31, 2019. On July 12, 2019, staff recommended the Commission deny the deferral authority request. On September 13, 2019, intervenor comments were filed opposing Duke Energy Ohio's request for continuation of existing deferral authority and on October 2, 2019, Duke Energy Ohio filed reply comments. Duke Energy Ohio cannot predict the outcome of this matter.

Duke Energy Kentucky Electric Base Rate Case

On September 3, 2019, Duke Energy Kentucky filed a rate case with the KPSC requesting an increase in electric base rates of approximately $46 million. On January 31, 2020, Duke Energy Kentucky filed rebuttal testimony updating its rate increase request to approximately $44 million. Hearings concluded on February 20, 2020, and briefing was completed March 20, 2020. On April 27, 2020, the KPSC issued its decision approving a $24 million increase for Duke Energy Kentucky with a 9.25% return on equity. The KPSC denied Duke Energy Kentucky's major storm deferral mechanism and EV and battery storage pilots. The KPSC approved Duke Energy Kentucky's Green Source Advantage tariff. New customer rates were effective on May 1, 2020. On May 18, 2020, Duke Energy Kentucky filed its motion for rehearing and on June 4, 2020, the motion was granted in part and denied in part by the KPSC. On October 16, 2020, the KPSC issued an Order on Rehearing authorizing an additional $4 million increase in revenue requirement bringing the total authorized revenue requirement increase to $28 million. Revised customer rates took effect in November 2020. The case has been resolved.

Regional Transmission Organization Realignment

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

The following table provides a reconciliation of the beginning and ending balance of Duke Energy Ohio's recorded liability for its exit obligation and share of MTEP costs recorded in Other within Current Liabilities and Other Noncurrent Liabilities on the Consolidated Balance Sheets. The retail portions of MTEP costs billed by MISO are recovered by Duke Energy Ohio through a non-bypassable rider. As of December 31, 2020, and 2019, $37 million and $40 million, respectively, are recorded in Regulatory assets on Duke Energy Ohio's Consolidated Balance Sheets.

(in millions)	December 31, 2019	Provisions/ Adjustments	Cash Reductions	December 31, 2020
Duke Energy Ohio	$ 54	$ (1)	$ (3)	$ 50

Duke Energy Indiana

Regulatory Assets and Liabilities

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

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	2020	2019	a Return	Period Ends
Regulatory Assets[(a)]				
AROs – coal ash	$ 615	$ 529	Yes	(b)
Accrued pension and OPEB	245	243		(e)
Retired generation facilities[(c)]	43	49	Yes	2030
PISCC and deferred operating expenses[(c)]	303	246	Yes	(b)
Hedge costs deferrals	22	23		(b)
AMI	19	18		2031
Vacation accrual	12	12		2021
Deferred fuel and purchased power	9	—		2021
Other	60	52		(b)
Total regulatory assets	1,328	1,172		
Less: current portion	125	90		
Total noncurrent regulatory assets	$ 1,203	$ 1,082		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes	$ 956	$ 1,008		(b)
Costs of removal	599	599		(d)
Accrued pension and OPEB	100	90		(e)
Amounts to be refunded to customers	17	—		(b)
Other	66	43		(b)
Total regulatory liabilities	1,738	1,740		
Less: current portion	111	55		
Total noncurrent regulatory liabilities	$ 1,627	$ 1,685		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Refunded over the life of the associated assets.
(e) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

COVID-19 Filing

In response to the COVID-19 pandemic, on March 6, 2020, Governor Eric Holcomb declared a public health disaster emergency in the state of Indiana, which is currently still in effect. At that time, Duke Energy Indiana had already voluntarily suspended all disconnections and waived late payment fees and check return fees. The utility also waived credit card fees for residential customers. The Executive Order requiring utilities in the state to suspend disconnection of utility service expired July 1, 2020.

On May 8, 2020, Duke Energy Indiana, along with other Indiana utilities, filed a request with the IURC for approval of deferral treatment for costs and revenue reductions associated with the COVID-19 pandemic. The utilities requested initial deferral approval in July 2020, with individual subdockets for each utility to be established for consideration of utility-specific cost and revenue impacts, cost recovery timing and customer payment plans. On June 29, 2020, the IURC issued an order in Phase 1 wherein it extended the disconnection moratorium for jurisdictional utilities until August 14, 2020, along with requiring six-month payment arrangements, waiver of late fees, reconnection fees, convenience fees and deposits. The IURC permitted jurisdictional utilities to use regulatory accounting for any impacts associated with the prohibition on utility disconnections, waiver or exclusion of certain utility fees (i.e., late fees, convenience fees, deposits, and reconnection fees), the use of expanded payment arrangements to aid customers, and for COVID-19 related uncollectible and incremental bad debt expense. The IURC did not permit recovery of lost revenues due to load reduction or carrying costs. In Phase 2 filings, individual utilities may choose to request regulatory accounting for other COVID-19 related operation and maintenance costs wherein evidence of the impact of any costs or offsetting savings can be presented and considered in an evidentiary hearing. On August 12, 2020, the IURC issued a supplemental order extending the requirement for six-month payment arrangements and waiver of certain customer fees for another 60 days but did not extend the disconnect moratorium. As such, Duke Energy Indiana resumed service disconnections for nonpayment in mid-September 2020. Normal billing practices resumed in mid-October 2020, except that Duke Energy Indiana has committed to provide extended payment arrangements into 2021 and to waive credit card and pay station fees for residential customers through the end of 2020. Customers were notified of the resumption of normal billing practices, the option of deferred payment arrangements and where to find assistance, if necessary. Duke Energy Indiana cannot predict the outcome of this matter.

2019 Indiana Rate Case

On July 2, 2019, Duke Energy Indiana filed a general rate case with the IURC for a rate increase for retail customers of approximately $395 million. The rebuttal case, filed on December 4, 2019, updated the requested revenue requirement to result in a 15.6% or $396 million average retail rate increase, including the impacts of the Utility Receipts Tax. Hearings concluded on February 7, 2020. On June 29, 2020, the IURC issued the order in the rate case approving a revenue increase of $146 million before certain adjustments and ratemaking refinements. The order provided for an overall cost of capital of 5.7% based on a 9.7% return on equity and a 53% equity component of the capital structure, and approved Duke Energy Indiana's requested forecasted rate base of $10.2 billion as of December 31, 2020, including the Edwardsport Integrated Gasification Combined Cycle (IGCC) Plant. The IURC reduced Duke Energy Indiana's request by slightly more than $200 million, when accounting for the utility receipts tax and other adjustments. Approximately 50% of the reduction is due to a prospective change in depreciation and use of regulatory asset for the end-of-life inventory at retired generating plants, approximately 20% is due to the approved 9.7% return on equity versus requested 10.4% and approximately 20% is related to miscellaneous earnings neutral adjustments. Step one rates are estimated to be approximately 75% of the total and became effective on July 30, 2020. Step two rates are estimated to be the remaining 25% of the total rate increase and will be implemented in mid-2021. Several groups filed notices of appeal of the IURC order on July 29, 2020. Appellate briefs were filed on October 14, 2020, focusing on three issues: wholesale sales allocations, coal ash basin cost recovery and the Edwardsport IGCC operating and maintenance expense level approved. The appeal was fully briefed in January 2021, and a decision is expected in the first or second quarter of 2021. Duke Energy Indiana cannot predict the outcome of this matter.

2020 Indiana Coal Ash Recovery Case

In Duke Energy Indiana's rate case, the IURC approved coal ash basin closure costs expended through 2018 including financing costs as a regulatory asset and included in rate base. The IURC opened a subdocket to deal with the post-2018 coal ash related expenditures. Duke Energy Indiana filed testimony on April 15, 2020, in the coal ash subdocket requesting recovery for the post-2018 coal ash basin closure costs for plans that have been approved by the Indiana Department of Environmental Management as well as continuing deferral, with carrying costs, on the balance. An evidentiary hearing was held on September 14, 2020, and the parties have agreed on a delayed briefing schedule that allows for the Indiana Rate Case appeal to proceed. Briefing will be completed by mid-May 2021. Duke Energy Indiana cannot predict the outcome of this matter.

Piedmont

Regulatory Assets and Liabilities

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

	December 31,		Earns/Pays	Recovery/Refund
(in millions)	**2020**	**2019**	**a Return**	**Period Ends**
Regulatory Assets[a]				
AROs – nuclear and other	**$ 20**	$ 16		[d]
Accrued pension and OPEB[c]	**88**	90		[f]
Vacation accrual	**12**	12		2021
Derivatives – natural gas supply contracts[e]	**122**	117		
Amounts due from customers	**110**	36	Yes	[b]
Deferred pipeline integrity costs[c]	**71**	62		2023
Other	**32**	30		[b]
Total regulatory assets	**455**	363		
Less: current portion	**153**	73		
Total noncurrent regulatory assets	**$ 302**	$ 290		
Regulatory Liabilities[a]				
Net regulatory liability related to income taxes	**$ 499**	$ 555		[b]
Costs of removal	**575**	574		[d]
Provision for rate refunds	**6**	41	Yes	
Accrued pension and OPEB[c]	**3**	3		[f]
Amounts to be refunded to customers	**34**	34	Yes	[b]
Other	**15**	5		[b]
Total regulatory liabilities	**1,132**	1,212		
Less: current portion	**88**	81		
Total noncurrent regulatory liabilities	**$ 1,044**	$ 1,131		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) The expected recovery or refund period varies or has not been determined.
(c) Included in rate base.
(d) Recovery over the life of the associated assets.
(e) Balance will fluctuate with changes in the market. Current contracts extend into 2031.
(f) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 22 for additional detail.

COVID-19 Filings

North Carolina

On March 10, 2020, Governor Roy Cooper declared a state of emergency due to the COVID-19 pandemic. On March 19, 2020, the NCUC issued on order directing that utilities under its jurisdiction suspend disconnections for nonpayment of utility bills during the state of emergency and allow for customers to enter into payment arrangements to pay off arrearages accumulated during the state of emergency after the end of the state of emergency. Additionally, to help mitigate the financial impacts of the COVID-19 pandemic on their customers, on March 19, 2020, Piedmont filed a request with the NCUC seeking authorization to waive: (1) any late payment charges incurred by a residential or nonresidential customer, effective March 21, 2020; (2) the application of fees for checks returned for insufficient funds for residential and nonresidential customers; (3) the reconnection charge when a residential or nonresidential customer seeks to have service restored for those customers whose service was recently disconnected for nonpayment and to work with customers regarding the other requirements to restore service, including re-establishment of credit; and (4) the fees and charges associated with the use of credit cards or debit cards to pay residential electric utility bills, effective March 21, 2020. The NCUC granted Piedmont's request on March 20, 2020.

On July 29, 2020, the NCUC issued its Order Lifting Disconnection Moratorium and Allowing Collection of Arrearages Pursuant to Special Repayment Plans. The order contained the following: (1) public utilities may resume customer disconnections due to nonpayment for bills first rendered on or after September 1, 2020, after appropriate notice; (2) the late fee moratorium will continue through the end of the state of emergency or until further order of the commission; (3) Duke Energy utilities may reinstate fees for checks returned for insufficient funds as well as transaction fees for use of credit cards or debit cards for bills first rendered on or after September 1, 2020; and (4) no sooner than September 1, 2020, the collection of past-due or delinquent accounts accrued up to and including August 31, 2020, may proceed subject to conditions.

Normal billing practices resumed as of October 1, 2020, with the exception of billing of late payment charges. Service disconnections for nonpayment resumed on November 4, 2020. Customers were notified of the resumption of normal billing practices, the option of payment arrangements and where to find assistance, if necessary. The NCUC's moratorium for the billing of late payment charges is still in effect until further order from the NCUC. Piedmont cannot predict the outcome of this matter.

South Carolina

On March 13, 2020, Governor Henry McMaster declared a state of emergency due to the COVID-19 pandemic. The governor also issued a letter on March 14, 2020, to the ORS Executive Director regarding the suspension of disconnection of essential utility services for nonpayment. On March 18, 2020, the PSCSC issued an order approving such waivers, and also approved waivers for regulations related to late fees and reconnect fees. The PSCSC's order also required utilities to track the financial impacts of actions taken pursuant to such waivers for possible reporting to the PSCSC.

On May 13, 2020, the ORS filed a letter with the PSCSC that included a request from Governor McMaster that utilities proceed with developing and implementing plans for phasing in normal business operations. On May 14, 2020, the PSCSC conditionally vacated the regulation waivers regarding termination of service and suspension of disconnect fees. Prior to termination, utilities are to refer past-due customers to local organizations for assistance and/or deferred payment arrangements. Piedmont filed a report on June 30, 2020, as required by PSCSC order, reporting revenue impact, costs and savings related to COVID-19 to date. Updates on cost impacts were filed on September 30, 2020, and on December 31, 2020, and included financial impacts through the end of August 2020, and the end of November 2020, respectively.

On September 30, 2020, Piedmont filed an update on its planned return to normal operations during the COVID-19 pandemic. Normal billing practices resumed as of October 1, 2020, and service disconnections for nonpayment resumed on November 4, 2020. Customers were notified of the resumption of normal billing practices, the option of payment arrangements and where to find assistance, if necessary.

Tennessee

On March 12, 2020, Governor Bill Lee declared a state of emergency due to the COVID-19 pandemic. In an effort to help mitigate the financial impacts of the COVID-19 pandemic on their customers, on March 20, 2020, Piedmont filed a request with the TPUC seeking authorization to waive, effective March 21, 2020: (1) any late payment charges incurred by a residential or nonresidential customer; (2) the application of fees for checks returned for insufficient funds for residential and nonresidential customers; and (3) the reconnection charge when a residential or nonresidential customer seeks to have service restored for those customers whose service was recently disconnected for nonpayment and to work with customers regarding the other requirements to restore service, including re-establishment of credit. The TPUC granted Piedmont's request by Order issued March 31,2020. The Order also stated that customers were not relieved of their obligation to pay for utility services received.

The TPUC held its regularly scheduled Commission Conference electronically on August 10, 2020, and on September 16, 2020, issued an Order Lifting Suspension of Disconnections of Service for Lack of Payment with Conditions, effective August 29, 2020. The conditions relate to required customer communications, payment plan options for past-due amounts and ongoing reporting to the TPUC. Potential recovery of costs related to the COVID-19 pandemic may be considered in future, individual docketed proceedings.

On October 15, 2020, Piedmont filed a report on its planned return to normal operations during the COVID-19 pandemic. Normal billing practices resumed as of October 1, 2020, and service disconnections for nonpayment resumed on November 4, 2020. Customers were notified of the resumption of normal billing practices, the option of payment arrangements and where to find assistance, if necessary.

2020 Tennessee Rate Case

On July 2, 2020, Piedmont filed an application with the TPUC, its first general rate case in Tennessee in nine years, for a rate increase for retail customers of approximately $30 million, which represents an approximate 15% increase in annual revenues. The rate increase is driven by significant infrastructure upgrade investments since its previous rate case. Approximately half of the plant additions being added to rate base are categories of capital investment not covered under the IMR mechanism, which was approved in 2013. Piedmont amended its requested increase to approximately $26 million in December 2020. As authorized under Tennessee law, Piedmont implemented interim rates on January 2, 2021, at the level requested in its adjusted request. A settlement reached with the Tennessee Consumer Advocate in mid-January was filed with the TPUC on February 2, 2021. The settlement results in an increase of revenues of approximately $16 million and a ROE of 9.8%. At a hearing on February 16, 2021, the TPUC voted to accept the settlement, with new rates effective January 2, 2021. Piedmont must refund customers the difference between bills previously rendered under interim rates and such bills if rendered under approved rates, plus interest.

2021 North Carolina Rate Case

On February 19, 2021, Piedmont filed notice with the NCUC of its intent to file a general rate case on or about March 22, 2021. Piedmont's last general rate case in North Carolina was filed in April 2019, with rates effective November 2019.

2019 North Carolina Rate Case

On April 1, 2019, Piedmont filed an application with the NCUC, its first general rate case in North Carolina in six years. On August 13, 2019, Piedmont, the Public Staff, and two groups representing industrial customers filed an Agreement and Stipulation Settlement resolving issues in the base rate proceeding, which included a return on equity of 9.7% and a capital structure of 52% equity and 48% debt. Other major components of the Stipulation included:

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

On October 31, 2019, the NCUC approved the Stipulation and the revised customer rates were effective November 1, 2019.

OTHER REGULATORY MATTERS

Atlantic Coast Pipeline, LLC

Atlantic Coast Pipeline (ACP pipeline) was planned to be an approximately 600-mile interstate natural gas pipeline running from West Virginia to North Carolina. Duke Energy indirectly owns a 47% interest, which is accounted for as an equity method investment through its Gas Utilities and Infrastructure segment.

On April 15, 2020, the United States District Court for the District of Montana granted partial summary judgment in favor of the plaintiffs in Northern Plains Resource Council v. U.S. Army Corps of Engineers (USACE) (Northern Plains), vacating USACE's Nationwide Permit 12 (NWP 12) and remanding it to USACE for consultation under the Endangered Species Act (ESA) of 1973. In Northern Plains, the court ruled that NWP 12 was unlawful because USACE did not consult under the ESA with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service prior to NWP 12's reissuance in 2017. Because NWP 12 has been vacated and its application enjoined, USACE currently has suspended verification of any new or pending applications under NWP 12 until further court action clarifies the situation.

On May 28, 2020, the U.S. Court of Appeals for the Ninth Circuit issued a ruling that limited the NWP 12 vacatur to energy infrastructure projects. In July 2020, the Supreme Court of the United States issued an order allowing other new oil and gas pipeline projects to use the NWP 12 process pending appeal to the U.S. Court of Appeals for the Ninth Circuit; however, that did not decrease the uncertainty associated with an eventual ruling. Together, these rulings indicated that the timeline to reinstate the necessary water crossing permits for ACP would likely cause further delays and cost increases.

On July 5, 2020, Dominion Energy, Inc. announced a sale of substantially all of its gas transmission and storage segment assets, operations core to the ACP pipeline project.

As a result of the uncertainty created by the NWP 12 rulings, the potential impact on the cost and schedule for the project, the ongoing legal challenges and the risk of additional legal challenges and delays through the construction period and Dominion's decision to sell substantially all of its gas transmission and storage segment assets, Duke Energy's Board of Directors and management decided that it was not prudent to continue to invest in the project. On July 5, 2020, Duke Energy and Dominion announced the cancellation of the ACP pipeline project.

As a result, Duke Energy recorded pretax charges to earnings of approximately $2.1 billion for the year ended December 31, 2020, within Equity in (losses) earnings of unconsolidated affiliates on the Duke Energy Consolidated Statements of Operations. The tax benefit associated with this cancellation was $393 million and is recorded in Income Tax Expense (Benefit) Expense on the Duke Energy Consolidated Statements of Operations. Additional charges of less than $20 million are expected to be recorded within the next three years as ACP incurs obligations to exit operations.

As part of the pretax charges to earnings of approximately $2.1 billion, Duke Energy has liabilities related to the cancellation of the ACP pipeline project of $928 million and $8 million within Other Current Liabilities and Other Noncurrent Liabilities, respectively, in the Gas Utilities and Infrastructure segment. The liability represents Duke Energy's obligation of approximately $860 million to fund ACP's outstanding debt and $76 million to satisfy remaining ARO requirements to restore construction sites.

See Notes 7 and 12 for additional information regarding this transaction.

Potential Coal Plant Retirements

The Subsidiary Registrants periodically file integrated resource plans (IRPs) with their state regulatory commissions. The IRPs provide a view of forecasted energy needs over a long term (10 to 20 years) and options being considered to meet those needs. IRPs filed by the Subsidiary Registrants included planning assumptions to potentially retire certain coal-fired generating facilities in North Carolina and Indiana earlier than their current estimated useful lives. Duke Energy continues to evaluate the potential need to retire these coal-fired generating facilities earlier than the current estimated useful lives and plans to seek regulatory recovery for amounts that would not be otherwise recovered when any of these assets are retired.

The table below contains the net carrying value of generating facilities planned for retirement or included in recent IRPs as evaluated for potential retirement. Dollar amounts in the table below are included in Net property, plant and equipment on the Consolidated Balance Sheets as of December 31, 2020, and exclude capitalized asset retirement costs.

	Capacity (in MW)	Remaining Net Book Value (in millions)
Duke Energy Carolinas		
Allen Steam Station Units 1-3[(a)]	604	$ 113
Allen Steam Station Units 4-5[(b)]	526	338
Cliffside Unit 5[(b)]	546	350
Duke Energy Progress		
Mayo Unit 1[(b)]	746	676
Roxboro Units 3-4[(b)]	1,409	484
Duke Energy Florida		
Crystal River Units 4-5[(c)]	1,430	1,696
Duke Energy Indiana		
Gallagher Units 2 and 4[(d)]	280	102
Gibson Units 1-5[(e)]	2,845	1,866
Cayuga Units 1-2[(e)]	1,005	777
Total Duke Energy	9,391	$ 6,402

(a) As part of the 2015 resolution of a lawsuit involving alleged New Source Review violations, Duke Energy Carolinas must retire Allen Steam Station Units 1 through 3 by December 31, 2024. The long-term energy options considered in the IRP could result in retirement of these units earlier than their current estimated useful lives. Unit 3 with a capacity of 270 MW and a net book value of $26 million at December 31, 2020, is expected to be retired in March 2021.

(b) These units are included in the IRP filed by Duke Energy Carolinas and Duke Energy Progress in North Carolina and South Carolina on September 1, 2020. The long-term energy options considered in the IRP could result in retirement of these units earlier than their current estimated useful lives. In 2019, Duke Energy Carolinas and Duke Energy Progress filed North Carolina rate cases that included depreciation studies that accelerate end-of-life dates for these plants. A decision by NCUC is expected by the end of the first quarter 2021.

(c) On January 14, 2021, Duke Energy Florida filed a settlement agreement with the FPSC, which proposed depreciation rates reflecting retirement dates for Duke Energy Florida's last two coal-fired generating facilities, Crystal River Units 4-5, eight years ahead of schedule in 2034 rather than in 2042, in support of Duke Energy's carbon reduction goals. A request for the FPSC to hold a hearing has been made and a decision by the FPSC is expected in the second quarter 2021.

(d) Duke Energy Indiana committed to either retire or stop burning coal at Gallagher Units 2 and 4 by December 31, 2022, as part of the 2016 settlement of Edwardsport IGCC matters. In February 2021, upon approval by MISO of a new retirement date, Duke Energy Indiana determined it would modify the retirement date to June 1, 2021.

(e) On July 1, 2019, Duke Energy Indiana filed its 2018 IRP with the IURC. The 2018 IRP included scenarios evaluating the potential retirement of coal-fired generating units at Gibson and Cayuga. The rate case filed July 2, 2019, included proposed depreciation rates reflecting retirement dates from 2026 to 2038. The depreciation rates reflecting these updated retirement dates were approved by the IURC as part of the rate case order issued on June 29, 2020.

4. COMMITMENTS AND CONTINGENCIES

INSURANCE

General Insurance

The Duke Energy Registrants have insurance and reinsurance coverage either directly or through indemnification from Duke Energy's captive insurance company, Bison, and its affiliates, consistent with companies engaged in similar commercial operations with similar type properties. The Duke Energy Registrants' coverage includes (i) commercial general liability coverage for liabilities arising to third parties for bodily injury and property damage; (ii) workers' compensation; (iii) automobile liability coverage; and (iv) property coverage for all real and personal property damage. Real and personal property damage coverage excludes electric transmission and distribution lines, but includes damages arising from boiler and machinery breakdowns, earthquakes, flood damage and extra expense, but not outage or replacement power coverage. All coverage is subject to certain deductibles or retentions, sublimits, exclusions, terms and conditions common for companies with similar types of operations. The Duke Energy Registrants self-insure their electric transmission and distribution lines against loss due to storm damage and other natural disasters. As discussed further in Note 3, Duke Energy Florida maintains a storm damage reserve and has a regulatory mechanism to recover the cost of named storms on an expedited basis.

The cost of the Duke Energy Registrants' coverage can fluctuate from year to year reflecting claims history and conditions of the insurance and reinsurance markets.

In the event of a loss, terms and amounts of insurance and reinsurance available might not be adequate to cover claims and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on the Duke Energy Registrants' results of operations, cash flows or financial position. Each company is responsible to the extent losses may be excluded or exceed limits of the coverage available.

Nuclear Insurance

Duke Energy Carolinas owns and operates McGuire and Oconee and operates and has a partial ownership interest in Catawba. McGuire and Catawba each have two reactors. Oconee has three reactors. The other joint owners of Catawba reimburse Duke Energy Carolinas for certain expenses associated with nuclear insurance per the Catawba joint owner agreements.

Duke Energy Progress owns and operates Robinson, Brunswick and Harris. Robinson and Harris each have one reactor. Brunswick has two reactors.

Duke Energy Florida owns Crystal River Unit 3, which permanently ceased operation in 2013 and reached a SAFSTOR condition in January 2018 after the successful transfer of all used nuclear fuel assemblies to an on-site dry cask storage facility.

In the event of a loss, terms and amounts of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on Duke Energy Carolinas', Duke Energy Progress' and Duke Energy Florida's results of operations, cash flows or financial position. Each company is responsible to the extent losses may be excluded or exceed limits of the coverage available.

Nuclear Liability Coverage

The Price-Anderson Act requires owners of nuclear reactors to provide for public nuclear liability protection per nuclear incident up to a maximum total financial protection liability. The maximum total financial protection liability, which is approximately $13.8 billion, is subject to change every five years for inflation and for the number of licensed reactors. Total nuclear liability coverage consists of a combination of private primary nuclear liability insurance coverage and a mandatory industry risk-sharing program to provide for excess nuclear liability coverage above the maximum reasonably available private primary coverage. The U.S. Congress could impose revenue-raising measures on the nuclear industry to pay claims.

Primary Liability Insurance

Duke Energy Carolinas and Duke Energy Progress have purchased the maximum reasonably available private primary nuclear liability insurance as required by law, which is $450 million per station. Duke Energy Florida has purchased $100 million primary nuclear liability insurance in compliance with the law.

Excess Liability Program

This program provides $13.3 billion of coverage per incident through the Price-Anderson Act's mandatory industry-wide excess secondary financial protection program of risk pooling. This amount is the product of potential cumulative retrospective premium assessments of $138 million times the current 97 licensed commercial nuclear reactors in the U.S. Under this program, licensees could be assessed retrospective premiums to compensate for public nuclear liability damages in the event of a nuclear incident at any licensed facility in the U.S. Retrospective premiums may be assessed at a rate not to exceed $20.5 million per year per licensed reactor for each incident. The assessment may be subject to state premium taxes.

Nuclear Property and Accidental Outage Coverage

Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are members of Nuclear Electric Insurance Limited (NEIL), an industry mutual insurance company, which provides property damage, nuclear accident decontamination and premature decommissioning insurance for each station for losses resulting from damage to its nuclear plants, either due to accidents or acts of terrorism. Additionally, NEIL provides accidental outage coverage for losses in the event of a major accidental outage at an insured nuclear station.

Pursuant to regulations of the NRC, each company's property damage insurance policies provide that all proceeds from such insurance be applied, first, to place the plant in a safe and stable condition after a qualifying accident and second, to decontaminate the plant before any proceeds can be used for decommissioning, plant repair or restoration.

Losses resulting from acts of terrorism are covered as common occurrences, such that if terrorist acts occur against one or more commercial nuclear power plants insured by NEIL within a 12-month period, they would be treated as one event and the owners of the plants where the act occurred would share one full limit of liability. The full limit of liability is currently $3.2 billion. NEIL sublimits the total aggregate for all of their policies for non-nuclear terrorist events to approximately $1.8 billion.

Each nuclear facility has accident property damage, nuclear accident decontamination and premature decommissioning liability insurance from NEIL with limits of $1.5 billion, except for Crystal River Unit 3. Crystal River Unit 3's limit is $50 million and is on an actual cash value basis. All nuclear facilities except for Catawba and Crystal River Unit 3 also share an additional $1.25 billion nuclear accident insurance limit above their dedicated underlying limit. This shared additional excess limit is not subject to reinstatement in the event of a loss. Catawba has a dedicated $1.25 billion of additional nuclear accident insurance limit above its dedicated underlying limit. Catawba and Oconee also have an additional $750 million of non-nuclear accident property damage limit. All coverages are subject to sublimits and significant deductibles.

NEIL's Accidental Outage policy provides some coverage, similar to business interruption, for losses in the event of a major accident property damage outage of a nuclear unit. Coverage is provided on a weekly limit basis after a significant waiting period deductible and at 100% of the applicable weekly limits for 52 weeks and 80% of the applicable weekly limits for up to the next 110 weeks. Coverage is provided until these applicable weekly periods are met, where the accidental outage policy limit will not exceed $490 million for McGuire and Catawba, $434 million for Harris, $420 million for Brunswick, $392 million for Oconee and $336 million for Robinson. NEIL sublimits the accidental outage recovery up to the first 104 weeks of coverage not to exceed $328 million from non-nuclear accidental property damage. Coverage amounts decrease in the event more than one unit at a station is out of service due to a common accident. All coverages are subject to sublimits and significant deductibles.

Potential Retroactive Premium Assessments

In the event of NEIL losses, NEIL's board of directors may assess member companies' retroactive premiums of amounts up to 10 times their annual premiums for up to six years after a loss. NEIL has never exercised this assessment. The maximum aggregate annual retrospective premium obligations for Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are $156 million, $93 million and $1 million, respectively. Duke Energy Carolinas' maximum assessment amount includes 100% of potential obligations to NEIL for jointly owned reactors. Duke Energy Carolinas would seek reimbursement from the joint owners for their portion of these assessment amounts.

ENVIRONMENTAL

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

Remediation Activities

In addition to the ARO recorded as a result of various environmental regulations, discussed in Note 9, the Duke Energy Registrants are responsible for environmental remediation at various sites. These include certain properties that are part of ongoing operations and sites formerly owned or used by Duke Energy entities. These sites are in various stages of investigation, remediation and monitoring. Managed in conjunction with relevant federal, state and local agencies, remediation activities vary based upon site conditions and location, remediation requirements, complexity and sharing of responsibility. If remediation activities involve joint and several liability provisions, strict liability, or cost recovery or contribution actions, the Duke Energy Registrants could potentially be held responsible for environmental impacts caused by other potentially responsible parties and may also benefit from insurance policies or contractual indemnities that cover some or all cleanup costs. Liabilities are recorded when losses become probable and are reasonably estimable. The total costs that may be incurred cannot be estimated because the extent of environmental impact, allocation among potentially responsible parties, remediation alternatives and/or regulatory decisions have not yet been determined at all sites. Additional costs associated with remediation activities are likely to be incurred in the future and could be significant. Costs are typically expensed as Operation, maintenance and other in the Consolidated Statements of Operations unless regulatory recovery of the costs is deemed probable.

The following tables contain information regarding reserves for probable and estimable costs related to the various environmental sites. These reserves are recorded in Other within Other Noncurrent Liabilities on the Consolidated Balance Sheets.

(in millions)	December 31, 2020	December 31, 2019
Reserves for Environmental Remediation		
Duke Energy	$ 75	$ 58
Duke Energy Carolinas	19	11
Progress Energy	19	16
Duke Energy Progress	6	4
Duke Energy Florida	12	9
Duke Energy Ohio	22	19
Duke Energy Indiana	6	4
Piedmont	10	8

Additional losses in excess of recorded reserves that could be incurred for the stages of investigation, remediation and monitoring for environmental sites that have been evaluated at this time are not material except as presented in the table below.

(in millions)	
Duke Energy	$ 25
Duke Energy Carolinas	12
Duke Energy Ohio	4
Piedmont	2

LITIGATION

Duke Energy Carolinas and Duke Energy Progress

Coal Ash Insurance Coverage Litigation

In March 2017, Duke Energy Carolinas and Duke Energy Progress filed a civil action in the North Carolina Business Court against various insurance providers. The lawsuit seeks payment for coal ash related liabilities covered by third-party liability insurance policies. The insurance policies were issued between 1971 and 1986 and provide third-party liability insurance for property damage. The civil action seeks damages for breach of contract and indemnification for costs arising from the Coal Ash Act and the EPA CCR rule at 15 coal-fired plants in North Carolina and South Carolina. Fact discovery has been completed. The parties filed dispositive pretrial motions relating to key legal issues on December 4, 2020. Hearings on these motions are scheduled to begin on February 24, 2021, and trial is scheduled for January 24, 2022. Duke Energy Carolinas and Duke Energy Progress cannot predict the outcome of this matter.

Duke Energy Carolinas

NTE Carolinas II, LLC Litigation

In November 2017, Duke Energy Carolinas entered into a standard FERC large generator interconnection agreement (LGIA) with NTE Carolinas II, LLC (NTE), a company that proposed to build a combined-cycle natural gas plant in Rockingham County, North Carolina. On September 6, 2019, Duke Energy Carolinas filed a lawsuit in Mecklenburg County Superior Court against NTE for breach of contract and alleging that NTE's failure to pay benchmark payments for Duke Energy Carolinas' transmission system upgrades required under the interconnection agreement constituted a termination of the interconnection agreement. Duke Energy Carolinas is seeking a monetary judgment against NTE because NTE failed to make multiple milestone payments. The lawsuit was moved to federal court in North Carolina. NTE filed a motion to dismiss Duke Energy Carolinas' complaint and brought counterclaims alleging anti-competitive conduct and violations of state and federal statutes. Duke Energy Carolinas filed a motion to dismiss NTE's counterclaims.

On May 21, 2020, in response to a NTE petition challenging Duke Energy Carolina's termination of the LGIA, FERC issued a ruling (i) that it has exclusive jurisdiction to determine whether a transmission provider may terminate a LGIA, (ii) FERC approval is required to terminate a conforming LGIA if objected to by the interconnection customer, and (iii) Duke Energy may not announce the termination of a conforming LGIA unless FERC has approved the termination.

On August 17, 2020, the court denied both NTE's and Duke Energy Carolinas' Motion to Dismiss. The parties are in active discovery and trial is scheduled for June 20, 2022. Duke Energy Carolinas cannot predict the outcome of this matter.

Asbestos-related Injuries and Damages Claims

Duke Energy Carolinas has experienced numerous claims for indemnification and medical cost reimbursement related to asbestos exposure. These claims relate to damages for bodily injuries alleged to have arisen from exposure to or use of asbestos in connection with construction and maintenance activities conducted on its electric generation plants prior to 1985. As of December 31, 2020, there were 145 asserted claims for non-malignant cases with the cumulative relief sought of up to $39 million and 56 asserted claims for malignant cases with the cumulative relief sought of up to $20 million. Based on Duke Energy Carolinas' experience, it is expected that the ultimate resolution of most of these claims likely will be less than the amount claimed.

Duke Energy Carolinas has recognized asbestos-related reserves of $572 million and $604 million at December 31, 2020, and 2019, respectively. These reserves are classified in Other within Other Noncurrent Liabilities and Other within Current Liabilities on the Consolidated Balance Sheets. These reserves are based upon Duke Energy Carolinas' best estimate for current and future asbestos claims through 2040 and are recorded on an undiscounted basis. In light of the uncertainties inherent in a longer-term forecast, management does not believe they can reasonably estimate the indemnity and medical costs that might be incurred after 2040 related to such potential claims. It is possible Duke Energy Carolinas may incur asbestos liabilities in excess of the recorded reserves.

Duke Energy Carolinas has third-party insurance to cover certain losses related to asbestos-related injuries and damages above an aggregate self-insured retention. Duke Energy Carolinas' cumulative payments began to exceed the self-insurance retention in 2008. Future payments up to the policy limit will be reimbursed by the third-party insurance carrier. The insurance policy limit for potential future insurance recoveries indemnification and medical cost claim payments is $714 million in excess of the self-insured retention. Receivables for insurance recoveries were $704 million and $742 million at December 31, 2020, and 2019, respectively. These amounts are classified in Other within Other Noncurrent Assets and Receivables within Current Assets on the Consolidated Balance Sheets. Duke Energy Carolinas is not aware of any uncertainties regarding the legal sufficiency of insurance claims. Duke Energy Carolinas believes the insurance recovery asset is probable of recovery as the insurance carrier continues to have a strong financial strength rating.

As described in Note 1, Duke Energy adopted the new guidance for credit losses effective January 1, 2020, using the modified retrospective method of adoption, which does not require restatement of prior year reported results. The reserve for credit losses for insurance receivables for the asbestos-related injuries and damages based on adoption of the new standard is $15 million for Duke Energy and Duke Energy Carolinas as of December 31, 2020. The insurance receivable is evaluated based on the risk of default and the historical losses, current conditions and expected conditions around collectability. Management evaluates the risk of default annually based on payment history, credit rating and changes in the risk of default from credit agencies.

Duke Energy Progress and Duke Energy Florida

Spent Nuclear Fuel Matters

On June 18, 2018, Duke Energy Progress and Duke Energy Florida sued the U.S. in the U.S. Court of Federal Claims for damages incurred for the period 2014 through 2018. The lawsuit claimed the Department of Energy breached a contract in failing to accept spent nuclear fuel under the Nuclear Waste Policy Act of 1982 and asserted damages for the cost of on-site storage in the amount of $100 million and $200 million for Duke Energy Progress and Duke Energy Florida, respectively. Discovery is ongoing and a trial is expected to occur in 2021.

Duke Energy Florida

Power Purchase Dispute Arbitration

Duke Energy Florida, on behalf of its customers, entered into a PPA for the purchase of firm capacity and energy from a qualifying facility under the Public Utilities Regulatory Policies Act of 1978. Duke Energy Florida determined the qualifying facility did not perform in accordance with the PPA, and Duke Energy Florida terminated the PPA. The qualifying facility counterparty filed a confidential American Arbitration Association (AAA) arbitration demand, challenging the termination of the PPA and seeking damages. Duke Energy Florida denies liability and is vigorously defending the arbitration claim.

The final arbitration hearing occurred during the week of December 7, 2020. An arbitral award has not yet been issued. Duke Energy Florida cannot predict the outcome of this matter.

Duke Energy Indiana

Coal Ash Basin Closure Plan Appeal

On January 27, 2020, Hoosier Environmental Council filed a Petition for Administrative Review with the Indiana Office of Environmental Adjudication (the court) challenging the Indiana Department of Environmental Management's December 10, 2019, partial approval of Duke Energy Indiana's ash pond closure plan. On March 11, 2020, Duke Energy Indiana filed a Motion to Dismiss. On May 5, 2020, the court denied the motion. The parties have completed discovery and will now prepare to file dispositive motions. Summary judgment briefing will be completed by March 30, 2021. If these claims survive dispositive motions, a hearing is scheduled for April 26, 2021. Duke Energy Indiana cannot predict the outcome of this matter. See Note 9 for additional information.

Other Litigation and Legal Proceedings

The Duke Energy Registrants are involved in other legal, tax and regulatory proceedings arising in the ordinary course of business, some of which involve significant amounts. The Duke Energy Registrants believe the final disposition of these proceedings will not have a material effect on their results of operations, cash flows or financial position.

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

	December 31,	
(in millions)	2020	2019
Reserves for Legal Matters		
Duke Energy	**$ 68**	$ 62
Duke Energy Carolinas	**2**	2
Progress Energy	**61**	55
Duke Energy Progress	**13**	12
Duke Energy Florida	**28**	22
Piedmont	**1**	1

OTHER COMMITMENTS AND CONTINGENCIES

General

As part of their normal business, the Duke Energy Registrants are party to various financial guarantees, performance guarantees and other contractual commitments to extend guarantees of credit and other assistance to various subsidiaries, investees and other third parties. These guarantees involve elements of performance and credit risk, which are not fully recognized on the Consolidated Balance Sheets and have uncapped maximum potential payments. See Note 7 for more information.

Purchase Obligations

Purchased Power

Duke Energy Progress, Duke Energy Florida and Duke Energy Ohio have ongoing purchased power contracts, including renewable energy contracts, with other utilities, wholesale marketers, co-generators and qualified facilities. These purchased power contracts generally provide for capacity and energy payments. In addition, Duke Energy Progress and Duke Energy Florida have various contracts to secure transmission rights.

The following table presents executory purchased power contracts with terms exceeding one year, excluding contracts classified as leases.

		Minimum Purchase Amount at December 31, 2020						
(in millions)	Contract Expiration	2021	2022	2023	2024	2025	Thereafter	Total
Duke Energy Progress[(a)]	2025-2032	$ 66	$ 73	$ 66	$ 67	$ 69	$ 69	$ 410
Duke Energy Florida[(b)]	2023-2025	335	354	374	262	91	—	1,416
Duke Energy Ohio[(c)(d)]	2022	130	55	—	—	—	—	185

(a) Contracts represent either 100% of net plant output or vary.
(b) Contracts represent 100% of net plant output.
(c) Contracts represent between 1% and 11% of net plant output.
(d) Excludes PPA with OVEC. See Note 17 for additional information.

Gas Supply and Capacity Contracts

Duke Energy Ohio and Piedmont routinely enter into long-term natural gas supply commodity and capacity commitments and other agreements that commit future cash flows to acquire services needed in their businesses. These commitments include pipeline and storage capacity contracts and natural gas supply contracts to provide service to customers. Costs arising from the natural gas supply commodity and capacity commitments, while significant, are pass-through costs to customers and are generally fully recoverable through the fuel adjustment or PGA procedures and prudence reviews in North Carolina and South Carolina and under the Tennessee Incentive Plan in Tennessee. In the Midwest, these costs are recovered via the Gas Cost Recovery Rate in Ohio or the Gas Cost Adjustment Clause in Kentucky. The time periods for fixed payments under pipeline and storage capacity contracts are up to 15 years. The time periods for fixed payments under natural gas supply contracts are up to six years. The time period for the natural gas supply purchase commitments is up to 11 years.

Certain storage and pipeline capacity contracts require the payment of demand charges that are based on rates approved by the FERC in order to maintain rights to access the natural gas storage or pipeline capacity on a firm basis during the contract term. The demand charges that are incurred in each period are recognized in the Consolidated Statements of Operations and Comprehensive Income as part of natural gas purchases and are included in Cost of natural gas.

The following table presents future unconditional purchase obligations under natural gas supply and capacity contracts as of December 31, 2020.

(in millions)	Duke Energy	Duke Energy Ohio	Piedmont
2021	$ 311	$ 41	$ 270
2022	270	28	242
2023	197	20	177
2024	139	17	122
2025	125	14	111
Thereafter	662	60	602
Total	$ 1,704	$ 180	$ 1,524

5. LEASES

As part of its operations, Duke Energy leases certain aircraft, space on communication towers, industrial equipment, fleet vehicles, fuel transportation (barges and railcars), land and office space under various terms and expiration dates. Additionally, Duke Energy Carolinas, Duke Energy Progress and Duke Energy Indiana have finance leases related to firm natural gas pipeline transportation capacity. Duke Energy Progress and Duke Energy Florida have entered into certain PPAs, which are classified as finance and operating leases.

Duke Energy has certain lease agreements, which include variable lease payments that are based on the usage of an asset. These variable lease payments are not included in the measurement of the ROU assets or operating lease liabilities on the Consolidated Financial Statements.

Certain Duke Energy lease agreements include options for renewal and early termination. The intent to renew a lease varies depending on the lease type and asset. Renewal options that are reasonably certain to be exercised are included in the lease measurements. The decision to terminate a lease early is dependent on various economic factors. No termination options have been included in any of the lease measurements.

Duke Energy Carolinas entered into a sale-leaseback arrangement in December 2019, to construct and occupy an office tower. The lease agreement was evaluated as a sale-leaseback of real estate and it was determined that the transaction did not qualify for sale-leaseback accounting. As a result, the transaction is being accounted for as a financing. For this transaction, Duke Energy Carolinas will continue to record the real estate on the Consolidated Balance Sheets within Property, Plant and Equipment as if it were the legal owner and will continue to recognize depreciation expense over the estimated useful life. In addition, a liability will be recorded for the failed sale-leaseback obligation within Long-Term Debt on the Consolidated Balance Sheets, with the monthly lease payments commencing after the construction phase being split between interest expense and principal pay down of the debt.

Duke Energy operates various renewable energy projects and sells the generated output to utilities, electric cooperatives, municipalities and commercial and industrial customers through long-term PPAs. In certain situations, these PPAs and the associated renewable energy projects qualify as operating leases. Rental income from these leases is accounted for as Nonregulated electric and other revenues in the Consolidated Statements of Operations. There are no minimum lease payments as all payments are contingent based on actual electricity generated by the renewable energy projects. Contingent lease payments were $275 million, $264 million and $268 million for the years ended December 31, 2020, 2019, and 2018, respectively. Renewable energy projects owned by Duke Energy and accounted for as operating leases had a cost basis of $3,335 million and $3,349 million and accumulated depreciation of $848 million and $721 million at December 31, 2020, and 2019, respectively. These assets are principally classified as nonregulated electric generation and transmission assets.

Piedmont has certain agreements with Duke Energy Carolinas for the construction and transportation of natural gas pipelines to supply its natural gas plant needs. Piedmont accounts for these pipeline lateral contracts as sales-type leases since the present value of the sum of the lease payments equals the fair value of the assets. These pipeline lateral assets owned by Piedmont had a current net investment basis of $2 million and $4 million as of December 31, 2020, and 2019, respectively, and a long-term net investment basis of $205 million and $70 million as of December 31, 2020, and 2019, respectively. These assets are classified in Other, within Current Assets and Other Noncurrent Assets, respectively, on Piedmont's Consolidated Balance Sheets. Duke Energy Carolinas accounts for the contracts as finance leases. The activity for these contracts is eliminated in consolidation at Duke Energy.

The following tables present the components of lease expense.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Operating lease expense[(a)]	$ 283	$ 53	$ 162	$ 72	$ 90	$ 11	$ 19	$ 7
Short-term lease expense[(a)]	4	—	2	1	1	—	1	—
Variable lease expense[(a)]	30	13	13	5	8	—	1	1
Finance lease expense								
Amortization of leased assets[(b)]	119	8	24	6	18	—	1	—
Interest on lease liabilities[(c)]	61	30	44	37	7	—	—	—
Total finance lease expense	180	38	68	43	25	—	1	—
Total lease expense	$ 497	$104	$ 245	$121	$124	$ 11	$ 22	$ 8

(a) Included in Operations, maintenance and other or, for barges and railcars, Fuel used in electric generation and purchased power on the Consolidated Statements of Operations.
(b) Included in Depreciation and amortization on the Consolidated Statements of Operations.
(c) Included in Interest Expense on the Consolidated Statements of Operations.

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

(a) Included in Operations, maintenance and other or, for barges and railcars, Fuel used in electric generation and purchased power on the Consolidated Statements of Operations.
(b) Included in Depreciation and amortization on the Consolidated Statements of Operations.
(c) Included in Interest Expense on the Consolidated Statements of Operations.

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

	Year Ended December 31,
(in millions)	2018
Duke Energy	$ 268
Duke Energy Carolinas	49
Progress Energy	143
Duke Energy Progress	75
Duke Energy Florida	68
Duke Energy Ohio	13
Duke Energy Indiana	21
Piedmont	11

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

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2021	$ 229	$ 24	$ 99	$ 44	$ 55	$ 2	$ 5	$ 5
2022	212	22	95	40	55	2	4	5
2023	202	20	95	41	54	2	4	5
2024	186	14	95	41	54	2	4	5
2025	162	10	85	31	54	2	4	5
Thereafter	870	51	376	252	124	20	59	—
Total operating lease payments	1,861	141	845	449	396	30	80	25
Less: present value discount	(344)	(24)	(149)	(95)	(54)	(9)	(24)	(2)
Total operating lease liabilities[(a)]	$ 1,517	$ 117	$ 696	$ 354	$ 342	$ 21	$ 56	$ 23

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

Combined Notes to Consolidated Financial Statements – (Continued)

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

	December 31, 2020					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Indiana
2021	$ 186	$ 38	$ 68	$ 43	$ 25	$ 1
2022	173	38	68	43	25	1
2023	174	38	68	43	25	1
2024	119	38	52	43	9	1
2025	51	38	48	43	5	1
Thereafter	762	502	481	475	6	26
Total finance lease payments	1,465	692	785	690	95	31
Less: amounts representing interest	(620)	(398)	(408)	(394)	(14)	(21)
Total finance lease liabilities	$ 845	$ 294	$ 377	$ 296	$ 81	$ 10

The following tables contain additional information related to leases.

		December 31, 2020							
(in millions)	Classification	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Assets									
Operating	Operating lease ROU assets, net	$ 1,524	$ 110	$ 690	$ 346	$ 344	$ 20	$ 55	$ 20
Finance	Net property, plant and equipment	797	312	416	297	119	—	7	—
Total lease assets		$ 2,321	$ 422	$ 1,106	$ 643	$ 463	$ 20	$ 62	$ 20
Liabilities									
Current									
Operating	Other current liabilities	$ 177	$ 20	$ 73	$ 31	$ 42	$ 1	$ 3	$ 4
Finance	Current maturities of long-term debt	129	5	26	7	19	—	—	—
Noncurrent									
Operating	Operating lease liabilities	1,340	97	623	323	300	20	53	19
Finance	Long-Term Debt	716	289	351	289	62	—	10	—
Total lease liabilities		$ 2,362	$ 411	$ 1,073	$ 650	$ 423	$ 21	$ 66	$ 23

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

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Cash paid for amounts included in the measurement of lease liabilities[(a)]								
Operating cash flows from operating leases	$ 271	$ 31	$ 124	$ 52	$ 72	$ 2	$ 6	$ 5
Operating cash flows from finance leases	61	30	44	37	7	—	—	—
Financing cash flows from finance leases	119	8	24	6	18	—	1	—
Lease assets obtained in exchange for new lease liabilities (non-cash)								
Operating[(b)]	$ 116	$ 17	$ —	$ —	$ —	$ —	$ 1	$ —
Finance	125	125	—	—	—	—	—	—

(a) No amounts were classified as investing cash flows from operating leases for the year ended December 31, 2020.
(b) Does not include ROU assets recorded as a result of the adoption of the new lease standard.

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Cash paid for amounts included in the measurement of lease liabilities[(a)]								
Operating cash flows from operating leases	$ 285	$ 34	$ 131	$ 53	$ 78	$ 2	$ 7	$ 7
Operating cash flows from finance leases	61	15	42	33	9	—	1	—
Financing cash flows from finance leases	111	6	21	5	16	1	—	—
Lease assets obtained in exchange for new lease liabilities (non-cash)								
Operating[(b)]	$ 194	$ 44	$ 30	$ 30	$ —	$ —	$ —	$ 1
Finance	251	76	175	175	—	—	—	—

(a) No amounts were classified as investing cash flows from operating leases for the year ended December 31, 2019.
(b) Does not include ROU assets recorded as a result of the adoption of the new lease standard.

	December 31, 2020							
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Weighted average remaining lease term (years)								
Operating leases	10	9	10	12	8	17	18	5
Finance leases	13	19	15	17	11	—	25	—
Weighted average discount rate[(a)]								
Operating leases	3.8%	3.4%	3.8%	3.9%	3.8%	4.2%	4.2%	3.6%
Finance leases	8.4%	11.6%	11.9%	12.4%	8.2%	—%	11.9%	—%

(a) The discount rate is calculated using the rate implicit in a lease if it is readily determinable. Generally, the rate used by the lessor is not provided to Duke Energy and in these cases the incremental borrowing rate is used. Duke Energy will typically use its fully collateralized incremental borrowing rate as of the commencement date to calculate and record the lease. The incremental borrowing rate is influenced by the lessee's credit rating and lease term and as such may differ for individual leases, embedded leases or portfolios of leased assets.

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

(a) The discount rate is calculated using the rate implicit in a lease if it is readily determinable. Generally, the rate used by the lessor is not provided to Duke Energy and in these cases the incremental borrowing rate is used. Duke Energy will typically use its fully collateralized incremental borrowing rate as of the commencement date to calculate and record the lease. The incremental borrowing rate is influenced by the lessee's credit rating and lease term and as such may differ for individual leases, embedded leases or portfolios of leased assets.

6. DEBT AND CREDIT FACILITIES

Summary of Debt and Related Terms

The following tables summarize outstanding debt.

	December 31, 2020								
(in millions)	Weighted Average Interest Rate	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured debt, maturing 2021-2078	3.71%	$ 23,669	$ 1,150	$ 3,150	$ 700	$ 350	$ 1,180	$ 403	$ 2,800
Secured debt, maturing 2021-2052	2.67%	4,270	543	1,584	252	1,332	—	—	—
First mortgage bonds, maturing 2021-2050[(a)]	4.00%	29,177	10,008	14,100	7,875	6,225	1,850	3,219	—
Finance leases, maturing 2022-2051[(b)]	6.96%	845	294	377	296	81	—	10	—
Tax-exempt bonds, maturing 2027-2041[(c)]	0.75%	477	—	48	48	—	77	352	—
Notes payable and commercial paper[(d)]	0.51%	3,407	—	—	—	—	—	—	—
Money pool/intercompany borrowings		—	806	3,119	445	196	194	281	530
Fair value hedge carrying value adjustment		4	4	—	—	—	—	—	—
Unamortized debt discount and premium, net[(e)]		1,217	(20)	(31)	(19)	(11)	(29)	(18)	(5)
Unamortized debt issuance costs[(f)]		(330)	(62)	(113)	(44)	(62)	(14)	(25)	(15)
Total debt	3.62%	$ 62,736	$ 12,723	$ 22,234	$ 9,553	$ 8,111	$ 3,258	$ 4,222	$ 3,310
Short-term notes payable and commercial paper		(2,873)	—	—	—	—	—	—	—
Short-term money pool/intercompany borrowings		—	(506)	(2,969)	(295)	(196)	(169)	(131)	(530)
Current maturities of long-term debt[(g)]		(4,238)	(506)	(1,426)	(603)	(823)	(50)	(70)	(160)
Total long-term debt[(g)]		$ 55,625	$ 11,711	$ 17,839	$ 8,655	$ 7,092	$ 3,039	$ 4,021	$ 2,620

(a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
(b) Duke Energy includes $24 million and $341 million of finance lease purchase accounting adjustments related to Duke Energy Progress and Duke Energy Florida, respectively, related to PPAs that are not accounted for as finance leases in their respective financial statements because of grandfathering provisions in GAAP.
(c) Substantially all tax-exempt bonds are secured by first mortgage bonds, letters of credit or the Master Credit Facility.
(d) Includes $625 million classified as Long-Term Debt on the Consolidated Balance Sheets due to the existence of long-term credit facilities that backstop these commercial paper balances, along with Duke Energy's ability and intent to refinance these balances on a long-term basis. The weighted average days to maturity for Duke Energy's commercial paper program was 23 days.
(e) Duke Energy includes $1,196 million and $117 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
(f) Duke Energy includes $33 million in purchase accounting adjustments primarily related to the merger with Progress Energy.
(g) Refer to Note 17 for additional information on amounts from consolidated VIEs.

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

(a) Substantially all electric utility property is mortgaged under mortgage bond indentures.
(b) Duke Energy includes $44 million and $419 million of finance lease purchase accounting adjustments related to Duke Energy Progress and Duke Energy Florida, respectively, related to PPAs that are not accounted for as finance leases in their respective financial statements because of grandfathering provisions in GAAP.
(c) Substantially all tax-exempt bonds are secured by first mortgage bonds, letters of credit or the Master Credit Facility.
(d) Includes $625 million that was classified as Long-Term Debt on the Consolidated Balance Sheets due to the existence of long-term credit facilities that backstop these commercial paper balances, along with Duke Energy's ability and intent to refinance these balances on a long-term basis. The weighted average days to maturity for Duke Energy's commercial paper programs was 14 days.
(e) Duke Energy includes $1,275 million and $137 million in purchase accounting adjustments related to Progress Energy and Piedmont, respectively.
(f) Duke Energy includes $37 million in purchase accounting adjustments primarily related to the merger with Progress Energy.
(g) Refer to Note 17 for additional information on amounts from consolidated VIEs.

Current Maturities of Long-Term Debt

The following table shows the significant components of Current maturities of Long-Term Debt on the Consolidated Balance Sheets. The Duke Energy Registrants currently anticipate satisfying these obligations with cash on hand and proceeds from additional borrowings.

(in millions)	Maturity Date	Interest Rate	December 31, 2020
Unsecured Debt[a]			
Duke Energy (Parent)	May 2021	0.721%[b]	$ 500
Piedmont	June 2021	4.240%	160
Duke Energy (Parent)	September 2021	3.550%	500
Duke Energy (Parent)	September 2021	1.800%	750
Duke Energy Florida	November 2021	0.482%[b]	200
Secured Debt			
Duke Energy Florida	April 2021	0.972%[b]	250
First Mortgage Bonds			
Duke Energy Carolinas	June 2021	3.900%	500
Duke Energy Florida	August 2021	3.100%	300
Duke Energy Progress	September 2021	3.000%	500
Duke Energy Progress	September 2021	8.625%	100
Other[c]			478
Current maturities of long-term debt			$ 4,238

(a) During October 2020, Progress Energy early retired $500 million of unsecured debt with an original maturity of January 15, 2021.
(b) Debt has a floating interest rate.
(c) Includes finance lease obligations, amortizing debt and small bullet maturities.

Maturities and Call Options

The following table shows the annual maturities of long-term debt for the next five years and thereafter. Amounts presented exclude short-term notes payable, commercial paper and money pool borrowings and debt issuance costs for the Subsidiary Registrants.

	December 31, 2020							
(in millions)	Duke Energy[a]	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2021	$ 4,238	$ 506	$ 1,426	$ 603	$ 823	$ 50	$ 70	$ 160
2022	4,905	721	1,736	1,208	78	—	84	—
2023	3,356	1,008	638	561	77	325	3	45
2024	1,344	9	76	10	66	—	4	40
2025	3,153	310	725	661	64	270	154	205
Thereafter	41,983	9,745	14,802	6,274	6,878	2,486	3,818	2,350
Total long-term debt, including current maturities	$ 58,979	$12,299	$ 19,403	$ 9,317	$ 7,986	$ 3,131	$ 4,133	$ 2,800

(a) Excludes $1,346 million in purchase accounting adjustments related to the Progress Energy merger and the Piedmont acquisition.

The Duke Energy Registrants have the ability under certain debt facilities to call and repay the obligation prior to its scheduled maturity. Therefore, the actual timing of future cash repayments could be materially different than as presented above.

Short-Term Obligations Classified as Long-Term Debt

Tax-exempt bonds that may be put to the Duke Energy Registrants at the option of the holder and certain commercial paper issuances and money pool borrowings are classified as Long-Term Debt on the Consolidated Balance Sheets. These tax-exempt bonds, commercial paper issuances and money pool borrowings, which are short-term obligations by nature, are classified as long-term due to Duke Energy's intent and ability to utilize such borrowings as long-term financing. As Duke Energy's Master Credit Facility and other bilateral letter of credit agreements have non-cancelable terms in excess of one year as of the balance sheet date, Duke Energy has the ability to refinance these short-term obligations on a long-term basis. The following tables show short-term obligations classified as long-term debt.

	December 31, 2020				
(in millions)	Duke Energy	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Ohio	Duke Energy Indiana
Tax-exempt bonds	$ 312	$ —	$ —	$ 27	$ 285
Commercial paper[a]	625	300	150	25	150
Total	$ 937	$ 300	$ 150	$ 52	$ 435

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

(a) Progress Energy amounts are equal to Duke Energy Progress amounts.

Summary of Significant Debt Issuances

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

			Year Ended December 31, 2020							
Issuance Date	Maturity Date	Interest Rate	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured Debt										
May 2020[a]	Jun 2030	2.450%	$ 500	$ 500	$ —	$ —	$ —	$ —	$ —	$ —
May 2020[b]	Jun 2050	3.350%	400	—	—	—	—	—	—	400
August 2020[c]	Feb 2022	0.400%[d]	700	—	—	700	—	—	—	—
September 2020[e]	Sep 2025	0.900%	650	650	—	—	—	—	—	—
September 2020[e]	Jun 2030	2.450%	350	350	—	—	—	—	—	—
First Mortgage Bonds										
January 2020[f]	Feb 2030	2.450%	500	—	500	—	—	—	—	—
January 2020[f]	Aug 2049	3.200%	400	—	400	—	—	—	—	—
March 2020[g]	Apr 2050	2.750%	550	—	—	—	—	—	550	—
May 2020[b]	Jun 2030	2.125%	400	—	—	—	—	400	—	—
June 2020[b]	Jun 2030	1.750%	500	—	—	—	500	—	—	—
August 2020[h]	Aug 2050	2.500%	600	—	—	600	—	—	—	—
Total issuances			$ 5,550	$ 1,500	$ 900	$ 1,300	$ 500	$ 400	$ 550	$ 400

(a) Debt issued to repay $500 million borrowing made under Duke Energy (Parent) revolving credit facility in March 2020, and for general corporate purposes.
(b) Debt issued to repay short-term debt and for general corporate purposes.
(c) Debt issued to repay $700 million term loan due December 2020.
(d) Debt issuance has a floating interest rate.
(e) Debt issued to repay a portion of outstanding commercial paper, to repay a portion of Duke Energy (Parent)'s outstanding $1.7 billion term loan due March 2021 and for general corporate purposes.
(f) Debt issued to repay at maturity $450 million first mortgage bonds due June 2020 and for general corporate purposes.
(g) Debt issued to repay at maturity $500 million first mortgage bonds due July 2020 and to pay down short-term debt.
(h) Debt issued to repay at maturity $300 million first mortgage bonds due September 2020 and for general corporate purposes.

			Year Ended December 31, 2019							
Issuance Date	Maturity Date	Interest Rate	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unsecured Debt										
March 2019[(a)]	Mar 2022	2.533%[(b)]	$ 300	$ 300	$ —	$ —	$ —	$ —	$ —	$ —
March 2019[(a)]	Mar 2022	3.227%	300	300	—	—	—	—	—	—
May 2019[(e)]	Jun 2029	3.500%	600	—	—	—	—	—	—	600
June 2019[(a)]	Jun 2029	3.400%	600	600	—	—	—	—	—	—
June 2019[(a)]	Jun 2049	4.200%	600	600	—	—	—	—	—	—
July 2019[(g)]	Jul 2049	4.320%	40	—	—	—	—	40	—	—
September 2019[(a)]	Oct 2025	3.230%	95	—	—	—	—	95	—	—
September 2019[(a)]	Oct 2029	3.560%	75	—	—	—	—	75	—	—
November 2019[(h)]	Nov 2021	2.167%[(b)]	200	—	—	—	200	—	—	—
First Mortgage Bonds										
January 2019[(c)]	Feb 2029	3.650%	400	—	—	—	—	400	—	—
January 2019[(c)]	Feb 2049	4.300%	400	—	—	—	—	400	—	—
March 2019[(d)]	Mar 2029	3.450%	600	—	—	600	—	—	—	—
August 2019[(a)]	Aug 2029	2.450%	450	—	450	—	—	—	—	—
August 2019[(a)]	Aug 2049	3.200%	350	—	350	—	—	—	—	—
September 2019[(f)]	Oct 2049	3.250%	500	—	—	—	—	—	500	—
November 2019[(i)]	Dec 2029	2.500%	700	—	—	—	700	—	—	—
Total issuances			$ 6,210	$ 1,800	$ 800	$ 600	$ 900	$ 1,010	$ 500	$ 600

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

AVAILABLE CREDIT FACILITIES

Master Credit Facility

In March 2020, Duke Energy amended its existing $8 billion Master Credit Facility to extend the termination date to March 2025. The Duke Energy Registrants, excluding Progress Energy, have borrowing capacity under the Master Credit Facility up to a specified sublimit for each borrower. Duke Energy has the unilateral ability at any time to increase or decrease the borrowing sublimits of each borrower, subject to a maximum sublimit for each borrower. The amount available under the Master Credit Facility has been reduced to backstop issuances of commercial paper, certain letters of credit and variable-rate demand tax-exempt bonds that may be put to the Duke Energy Registrants at the option of the holder.

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

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy (Parent)	Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Facility size[a]	$ 8,000	$ 2,650	$ 1,475	$ 1,250	$ 800	$ 625	$ 600	$ 600
Reduction to backstop issuances								
Commercial paper[b]	(2,239)	—	(736)	(407)	(179)	(176)	(257)	(484)
Outstanding letters of credit	(40)	(34)	(4)	(2)	—	—	—	—
Tax-exempt bonds	(81)	—	—	—	—	—	(81)	—
Available capacity	$ 5,640	$ 2,616	$ 735	$ 841	$ 621	$ 449	$ 262	$ 116

(a) Represents the sublimit of each borrower.
(b) Duke Energy issued $625 million of commercial paper and loaned the proceeds through the money pool to Duke Energy Carolinas, Duke Energy Progress, Duke Energy Ohio and Duke Energy Indiana. The balances are classified as Long-Term Debt Payable to Affiliated Companies in the Consolidated Balance Sheets.

Term Loan Facility

In response to market volatility and ongoing liquidity impacts from COVID-19, in March 2020, Duke Energy (Parent) entered into a $1.5 billion, 364-day Term Loan Credit Agreement, borrowing the full $1.5 billion available on March 19, 2020. The term loan contained a provision for increasing the amount available for borrowing by up to $500 million. Duke Energy (Parent) exercised this provision on March 27, 2020, borrowing an additional $188 million. Proceeds were used to reduce outstanding commercial paper and for general corporate purposes. The loan was repaid by Duke Energy (Parent) as of December 31, 2020. Refer to Note 1 for additional information on the COVID-19 pandemic.

Three-Year Revolving Credit Facility

Duke Energy (Parent) has a $1 billion revolving credit facility. The facility had an initial termination date of June 2020, but in May 2019, Duke Energy extended the termination date of the facility to May 2022. Borrowings under this facility will be used for general corporate purposes. As of December 31, 2020, $500 million has been drawn under this facility. This balance is classified as Long-term debt on Duke Energy's Consolidated Balance Sheets. Any undrawn commitments can be drawn, and borrowings can be prepaid, at any time throughout the term of the facility. During the first quarter of 2020, an additional $500 million was drawn under this facility to manage liquidity impacts from COVID-19. The additional $500 million was paid down during the second quarter of 2020. The terms and conditions of the facility are generally consistent with those governing Duke Energy's Master Credit Facility.

Duke Energy Progress Term Loan Facility

In December 2018, Duke Energy Progress entered into a two-year term loan facility with commitments totaling $700 million. Borrowings under the facility were used to pay storm-related costs, pay down commercial paper and to partially finance an upcoming bond maturity. As of December 31, 2019, the entire $700 million had been drawn under the term loan and was classified as Current maturities of long-term debt on Duke Energy Progress' Consolidated Balance Sheets. In August 2020, Duke Energy Progress repaid its $700 million two-year term loan facility.

Other Debt Matters

In September 2019, Duke Energy filed a Form S-3 with the SEC. Under this Form S-3, which is uncapped, the Duke Energy Registrants, excluding Progress Energy, may issue debt and other securities, including preferred stock, in the future at amounts, prices and with terms to be determined at the time of future offerings. The registration statement was filed to replace a similar prior filing upon expiration of its three-year term and also allows for the issuance of common and preferred stock by Duke Energy.

Duke Energy has an effective Form S-3 with the SEC to sell up to $3 billion of variable denomination floating-rate demand notes, called PremierNotes. The Form S-3 states that no more than $1.5 billion of the notes will be outstanding at any particular time. The notes are offered on a continuous basis and bear interest at a floating rate per annum determined by the Duke Energy PremierNotes Committee, or its designee, on a weekly basis. The interest rate payable on notes held by an investor may vary based on the principal amount of the investment. The notes have no stated maturity date, are non-transferable and may be redeemed in whole or in part by Duke Energy or at the investor's option at any time. The balance as of December 31, 2020, and 2019, was $1,168 million and $1,049 million, respectively. The notes are short-term debt obligations of Duke Energy and are reflected as Notes payable and commercial paper on Duke Energy's Consolidated Balance Sheets.

Money Pool

The Subsidiary Registrants, excluding Progress Energy, are eligible to receive support for their short-term borrowing needs through participation with Duke Energy and certain of its subsidiaries in a money pool arrangement. Under this arrangement, those companies with short-term funds may provide short-term loans to affiliates participating in this arrangement. The money pool is structured such that the Subsidiary Registrants, excluding Progress Energy, separately manage their cash needs and working capital requirements. Accordingly, there is no net settlement of receivables and payables between money pool participants. Duke Energy (Parent), may loan funds to its participating subsidiaries, but may not borrow funds through the money pool. Accordingly, as the money pool activity is between Duke Energy and its wholly owned subsidiaries, all money pool balances are eliminated within Duke Energy's Consolidated Balance Sheets.

Money pool receivable balances are reflected within Notes receivable from affiliated companies on the Subsidiary Registrants' Consolidated Balance Sheets. Money pool payable balances are reflected within either Notes payable to affiliated companies or Long-Term Debt Payable to Affiliated Companies on the Subsidiary Registrants' Consolidated Balance Sheets.

Restrictive Debt Covenants

The Duke Energy Registrants' debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio not to exceed 65% for each borrower, excluding Piedmont, and 70% for Piedmont. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements. As of December 31, 2020, each of the Duke Energy Registrants was in compliance with all covenants related to their debt agreements. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

Other Loans

As of December 31, 2020, and 2019, Duke Energy had loans outstanding of $817 million, including $35 million at Duke Energy Progress and $777 million, including $36 million at Duke Energy Progress, respectively, against the cash surrender value of life insurance policies it owns on the lives of its executives. The amounts outstanding were carried as a reduction of the related cash surrender value that is included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.

7. GUARANTEES AND INDEMNIFICATIONS

Duke Energy has various financial and performance guarantees and indemnifications with non-consolidated entities, which are issued in the normal course of business. As discussed below, these contracts include performance guarantees, standby letters of credit, debt guarantees and indemnifications. Duke Energy enters into these arrangements to facilitate commercial transactions with third parties by enhancing the value of the transaction to the third party. At December 31, 2020, Duke Energy does not believe conditions are likely for significant performance under these guarantees, except for ACP as described below. To the extent liabilities are incurred as a result of the activities covered by the guarantees, such liabilities are included on the accompanying Consolidated Balance Sheets.

On January 2, 2007, Duke Energy completed the spin-off of its previously wholly owned natural gas businesses to shareholders. Guarantees issued by Duke Energy or its affiliates, or assigned to Duke Energy prior to the spin-off, remained with Duke Energy subsequent to the spin-off. Guarantees issued by Spectra Capital or its affiliates prior to the spin-off remained with Spectra Capital subsequent to the spin-off, except for guarantees that were later assigned to Duke Energy. Duke Energy has indemnified Spectra Capital against any losses incurred under certain of the guarantee obligations that remain with Spectra Capital. At December 31, 2020, the maximum potential amount of future payments associated with these guarantees were $56 million, the majority of which expires by 2028.

In October 2017, ACP executed a $3.4 billion revolving credit facility with a stated maturity date of October 2021. Duke Energy entered into a guarantee agreement to support its share of the ACP revolving credit facility. In July 2020, ACP reduced the size of the credit facility to $1.9 billion. Duke Energy's maximum exposure to loss under the terms of the guarantee is $860 million as of December 31, 2020. This amount represents 47% of the outstanding borrowings under the credit facility.

Duke Energy recognized the $860 million within Other Current Liabilities on the Consolidated Balance Sheets at December 31, 2020, of which $95 million was previously recognized due the adoption of new guidance for credit losses effective January 1, 2020. See Notes 3 and 12 for more information. The remaining reserve for credit losses for financial guarantees of $4 million at December 31, 2020, is included within Other Noncurrent Liabilities on the Duke Energy's Consolidated Balance Sheets. Management considers financial guarantees for evaluation under this standard based on the anticipated amount outstanding at the time of default. The reserve for credit losses is based on the evaluation of the contingent components of financial guarantees. Management evaluates the risk of default, exposure and length of time remaining in the period for each contract.

In addition to the Spectra Capital and ACP revolving credit facility guarantees above, Duke Energy has issued performance guarantees to customers and other third parties that guarantee the payment and performance of other parties, including certain non-wholly owned entities, as well as guarantees of debt of certain non-consolidated entities. If such entities were to default on payments or performance, Duke Energy would be required under the guarantees to make payments on the obligations of these entities. The maximum potential amount of future payments required under these guarantees as of December 31, 2020, was $56 million of which $53 million expire between 2021 and 2030, with the remaining performance guarantees having no contractual expiration. Additionally, certain guarantees have uncapped maximum potential payments; however, Duke Energy does not believe these guarantees will have a material effect on its results of operations, cash flows or financial position.

Duke Energy uses bank-issued standby letters of credit to secure the performance of wholly owned and non-wholly owned entities to a third party or customer. Under these arrangements, Duke Energy has payment obligations to the issuing bank that are triggered by a draw by the third party or customer due to the failure of the wholly owned or non-wholly owned entity to perform according to the terms of its underlying contract. At December 31, 2020, Duke Energy had issued a total of $566 million in letters of credit, which expire between 2021 and 2023. The unused amount under these letters of credit was $76 million.

Duke Energy recognized $11 million and $23 million as of December 31, 2020, and 2019, respectively, primarily in Other within Other Noncurrent Liabilities on the Consolidated Balance Sheets, for the guarantees discussed above. As current estimates change, additional losses related to guarantees and indemnifications to third parties, which could be material, may be recorded by the Duke Energy Registrants in the future.

8. JOINT OWNERSHIP OF GENERATING AND TRANSMISSION FACILITIES

The Duke Energy Registrants maintain ownership interests in certain jointly owned generating and transmission facilities. The Duke Energy Registrants are entitled to a share of the generating capacity and output of each unit equal to their respective ownership interests. The Duke Energy Registrants pay their ownership share of additional construction costs, fuel inventory purchases and operating expenses. The Duke Energy Registrants share of revenues and operating costs of the jointly owned facilities is included within the corresponding line in the Consolidated Statements of Operations. Each participant in the jointly owned facilities must provide its own financing.

The following table presents the Duke Energy Registrants' interest of jointly owned plant or facilities and amounts included on the Consolidated Balance Sheets. All facilities are operated by the Duke Energy Registrants and are included in the Electric Utilities and Infrastructure segment.

	December 31, 2020			
(in millions except for ownership interest)	**Ownership Interest**	**Property, Plant and Equipment**	**Accumulated Depreciation**	**Construction Work in Progress**
Duke Energy Carolinas				
Catawba (units 1 and 2)[(a)]	19.25%	$1,017	$ 518	$ 23
W.S. Lee CC[(b)]	87.27%	632	49	1
Duke Energy Indiana				
Gibson (unit 5)[(c)]	50.05%	447	199	4
Vermillion[(d)]	62.50%	174	101	1
Transmission and local facilities[(c)]	Various	5,817	1,508	150

(a) Jointly owned with North Carolina Municipal Power Agency Number 1, NCEMC and PMPA.
(b) Jointly owned with NCEMC.
(c) Jointly owned with WVPA and IMPA.
(d) Jointly owned with WVPA.

9. ASSET RETIREMENT OBLIGATIONS

Duke Energy records an ARO when it has a legal obligation to incur retirement costs associated with the retirement of a long-lived asset and the obligation can be reasonably estimated. Certain assets of the Duke Energy Registrants have an indeterminate life, such as transmission and distribution facilities, and thus the fair value of the retirement obligation is not reasonably estimable. A liability for these AROs will be recorded when a fair value is determinable.

The Duke Energy Registrants' regulated operations accrue costs of removal for property that does not have an associated legal retirement obligation based on regulatory orders from state commissions. These costs of removal are recorded as a regulatory liability in accordance with regulatory accounting treatment. The Duke Energy Registrants do not accrue the estimated cost of removal for any nonregulated assets. See Note 3 for the estimated cost of removal for assets without an associated legal retirement obligation, which are included in Regulatory liabilities on the Consolidated Balance Sheets.

The following table presents the AROs recorded on the Consolidated Balance Sheets.

	December 31, 2020							
(in millions)	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Decommissioning of nuclear power facilities[(a)]	$ 6,845	$ 2,695	$ 4,101	$ 3,642	$ 459	$ —	$ —	$ —
Closure of ash impoundments	5,778	2,597	1,973	1,950	23	67	1,140	—
Other	381	58	75	43	32	44	36	20
Total asset retirement obligation	$ 13,004	$ 5,350	$ 6,149	$ 5,635	$ 514	$111	$ 1,176	$ 20
Less: Current portion	718	264	283	283	—	3	168	—
Total noncurrent asset retirement obligation	$ 12,286	$ 5,086	$ 5,866	$ 5,352	$ 514	$108	$ 1,008	$ 20

(a) Duke Energy amount includes purchase accounting adjustments related to the merger with Progress Energy.

Nuclear Decommissioning Liability

AROs related to nuclear decommissioning are based on site-specific cost studies. The NCUC, PSCSC and FPSC require updated cost estimates for decommissioning nuclear plants every five years.

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

(in millions)	Annual Funding Requirement[a]	Decommissioning Costs[a]	Year of Cost Study
Duke Energy	$ 27	$ 9,105	2018 or 2019
Duke Energy Carolinas[b][c]	—	4,365	2018
Duke Energy Progress[d]	27	4,181	2019
Duke Energy Florida[e]	—	559	N/A

(a) Amounts for Progress Energy equal the sum of Duke Energy Progress and Duke Energy Florida.
(b) Decommissioning cost for Duke Energy Carolinas reflects its ownership interest in jointly owned reactors. Other joint owners are responsible for decommissioning costs related to their interest in the reactors.
(c) Duke Energy Carolinas' site-specific nuclear decommissioning cost study completed in 2018 was filed with the NCUC and PSCSC in 2019. A new funding study was also completed and filed with the NCUC and PSCSC in 2019.
(d) Duke Energy Progress' site-specific nuclear decommissioning cost study completed in 2019 was filed with the NCUC and PSCSC in March 2020. Duke Energy Progress also completed a funding study, which was filed with the NCUC and PSCSC in July 2020.
(e) During 2019, Duke Energy Florida reached an agreement to transfer decommissioning work for Crystal River Unit 3 to a third party and decommissioning costs are based on the agreement with this third party rather than a cost study. Regulatory approval was received from the NRC and the FPSC in April 2020 and August 2020, respectively. See Note 3 for more information.

Nuclear Decommissioning Trust Funds

Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida each maintain NDTFs that are intended to pay for the decommissioning costs of their respective nuclear power plants. The NDTF investments are managed and invested in accordance with applicable requirements of various regulatory bodies including the NRC, FERC, NCUC, PSCSC, FPSC and the IRS.

Use of the NDTF investments is restricted to nuclear decommissioning activities including license termination, spent fuel and site restoration. The license termination and spent fuel obligations relate to contaminated decommissioning and are recorded as AROs. The site restoration obligation relates to non-contaminated decommissioning and is recorded to cost of removal within Regulatory liabilities on the Consolidated Balance Sheets.

The following table presents the fair value of NDTF assets legally restricted for purposes of settling AROs associated with nuclear decommissioning. Duke Energy Florida entered into an agreement with a third party to decommission Crystal River Unit 3 and was granted an exemption from the NRC, which allows for use of the NDTF for all aspects of nuclear decommissioning. The entire balance of Duke Energy Florida's NDTF may be applied toward license termination, spent fuel and site restoration costs incurred to decommission Crystal River Unit 3 and is excluded from the table below. See Note 16 for additional information related to the fair value of the Duke Energy Registrants' NDTFs.

	December 31,	
(in millions)	2020	2019
Duke Energy	$ 7,726	$ 6,766
Duke Energy Carolinas	4,381	3,837
Duke Energy Progress	3,345	2,929

Nuclear Operating Licenses

Operating licenses for nuclear units are potentially subject to extension. The following table includes the current expiration of nuclear operating licenses.

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

The NRC has acknowledged permanent cessation of operation and permanent removal of fuel from the reactor vessel at Crystal River Unit 3. Therefore, the license no longer authorizes operation of the reactor. During 2019, Duke Energy Florida entered into an agreement for the accelerated decommissioning of Crystal River Unit 3. Regulatory approval was received from the NRC and the FPSC in April 2020 and August 2020, respectively. See Note 3 for more information.

Closure of Ash Impoundments

The Duke Energy Registrants are subject to state and federal regulations covering the closure of coal ash impoundments, including the EPA CCR rule and the Coal Ash Act, and other agreements. AROs recorded on the Duke Energy Registrants' Consolidated Balance Sheets include the legal obligation for closure of coal ash basins and the disposal of related ash as a result of these regulations and agreements.

The ARO amount recorded on the Consolidated Balance Sheets is based upon estimated closure costs for impacted ash impoundments. The amount recorded represents the discounted cash flows for estimated closure costs based upon specific closure plans. Actual costs to be incurred will be dependent upon factors that vary from site to site. The most significant factors are the method and time frame of closure at the individual sites. Closure methods considered include removing the water from ash basins, consolidating material as necessary and capping the ash with a synthetic barrier, excavating and relocating the ash to a lined structural fill or lined landfill or recycling the ash for concrete or some other beneficial use. The ultimate method and timetable for closure will be in compliance with standards set by federal and state regulations and other agreements. The ARO amount will be adjusted as additional information is gained through the closure and post-closure process, including acceptance and approval of compliance approaches, which may change management assumptions, and may result in a material change to the balance. See ARO Liability Rollforward section below for information on revisions made to the coal ash liability during 2020 and 2019.

Asset retirement costs associated with the AROs for operating plants and retired plants are included in Net property, plant and equipment and Regulatory assets, respectively, on the Consolidated Balance Sheets. See Note 3 for additional information on Regulatory assets related to AROs.

Cost recovery for future expenditures will be pursued through the normal ratemaking process with federal and state utility commissions, which permit recovery of necessary and prudently incurred costs associated with Duke Energy's regulated operations. See Note 3 for additional information on recovery of coal ash costs.

ARO Liability Rollforward

The following tables present changes in the liability associated with AROs.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2018	$ 10,467	$ 3,949	$ 5,411	$ 4,820	$ 591	$ 93	$ 722	$ 19
Accretion expense[(a)]	508	235	252	227	25	3	28	1
Liabilities settled[(b)]	(895)	(329)	(499)	(460)	(39)	(12)	(54)	—
Liabilities incurred in the current year	25	18	7	—	7	—	—	—
Revisions in estimates of cash flows[(c)]	3,213	1,861	1,300	1,306	(6)	(4)	136	(3)
Balance at December 31, 2019	13,318	5,734	6,471	5,893	578	80	832	17
Accretion expense[(a)]	542	258	246	225	21	4	33	1
Liabilities settled[(b)]	(724)	(198)	(451)	(358)	(93)	(2)	(74)	—
Liabilities incurred in the current year	22	—	5	—	5	—	—	—
Revisions in estimates of cash flows[(d)]	(154)	(444)	(122)	(125)	3	29	385	2
Balance at December 31, 2020	$ 13,004	$ 5,350	$ 6,149	$ 5,635	$ 514	$ 111	$ 1,176	$ 20

(a) Substantially all accretion expense for the years ended December 31, 2020, and 2019, relates to Duke Energy's regulated operations and has been deferred in accordance with regulatory accounting treatment.
(b) Amounts primarily relate to ash impoundment closures and nuclear decommissioning.
(c) Amounts primarily relate to increases in closure estimates for certain ash impoundments as a result of the NCDEQ's April 1, 2019, Order and the related settlement agreement dated December 31, 2019.
(d) Primarily relates to decreases due to revised basin closure cost estimates, partially offset by increases related to new closure plan approvals, post closure maintenance and beneficiation costs. Duke Energy Indiana estimates also include the impacts of closure estimates for certain ash impoundments due to the impact of Hoosier Environmental Council's petition filed with the court challenging the Indiana Department of Environmental Management's partial approval of Duke Energy Indiana's ash pond closure plan. See Note 4 for more information on Hoosier Environmental Council's petition. The incremental amount recorded represents the discounted cash flows for estimated closure costs based upon the probability weightings of the potential closure methods as evaluated on a site-by-site basis.

10. PROPERTY, PLANT AND EQUIPMENT

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

	December 31, 2020								
(in millions)	Average Remaining Useful Life (Years)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Land		$ 2,046	$ 536	$ 908	$ 463	$ 445	$ 171	$ 118	$ 279
Plant – Regulated									
Electric generation, distribution and transmission	39	117,107	44,059	50,785	31,375	19,410	6,255	16,008	—
Natural gas transmission and distribution	54	10,799	—	—	—	—	3,136	—	7,663
Other buildings and improvements	36	2,038	740	459	197	262	374	300	165
Plant – Nonregulated									
Electric generation, distribution and transmission	27	5,444	—	—	—	—	—	—	—
Other buildings and improvements	10	519	—	—	—	—	—	—	—
Nuclear fuel		3,284	1,837	1,447	1,447	—	—	—	—
Equipment	15	2,608	620	759	498	261	385	238	122
Construction in process		6,645	1,645	2,013	709	1,304	407	409	581
Other	14	5,090	1,203	1,521	1,070	441	294	309	324
Total property, plant and equipment[(a)(e)]		155,580	50,640	57,892	35,759	22,123	11,022	17,382	9,134
Total accumulated depreciation – regulated[(b)(c)]		(46,216)	(17,453)	(18,368)	(12,801)	(5,560)	(3,013)	(5,661)	(1,749)
Total accumulated depreciation – nonregulated[(d)(e)]		(2,611)	—	—	—	—	—	—	—
Generation facilities to be retired, net		29	—	29	29	—	—	—	—
Total net property, plant and equipment		$106,782	$ 33,187	$ 39,553	$ 22,987	$16,563	$ 8,009	$11,721	$ 7,385

(a) Includes finance leases of $832 million, $335 million, $416 million, $297 million, $119 million and $10 million at Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana, respectively, primarily within Plant – Regulated. The Progress Energy, Duke Energy Progress and Duke Energy Florida amounts are net of $141 million, $24 million and $117 million, respectively, of accumulated amortization of finance leases.

(b) Includes $1,832 million, $1,010 million, $822 million and $822 million of accumulated amortization of nuclear fuel at Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.

(c) Includes accumulated amortization of finance leases of $12 million, $23 million and $3 million at Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.

(d) Includes accumulated amortization of finance leases of $23 million at Duke Energy.

(e) Includes gross property, plant and equipment cost of consolidated VIEs of $6,394 million and accumulated depreciation of consolidated VIEs of $1,242 million at Duke Energy.

In 2020, Duke Energy evaluated recoverability of its renewable merchant plants principally located in the Electric Reliability Council of Texas West market and in the PJM West market due to declining market pricing and declining long-term forecasted energy prices, primarily driven by lower forecasted natural gas prices. Duke Energy determined that the assets were not impaired because the carrying value of $210 million approximates the aggregate estimated future undiscounted cash flows. A continued decline in energy market pricing would likely result in a future impairment. Duke Energy retained 51% ownership interest in these facilities following the 2019 transaction to sell a minority interest in certain renewable assets. See Note 1 for further information.

	December 31, 2019								
(in millions)	Average Remaining Useful Life (Years)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Land		$ 2,091	$ 520	$ 884	$ 449	$ 435	$ 150	$ 117	$ 388
Plant – Regulated									
Electric generation, distribution and transmission	39	111,739	42,723	48,142	30,018	18,124	5,838	15,032	—
Natural gas transmission and distribution	54	9,839	—	—	—	—	2,892	—	6,947
Other buildings and improvements	32	1,810	714	401	162	239	269	278	148
Plant – Nonregulated									
Electric generation, distribution and transmission	28	5,103	—	—	—	—	—	—	—
Other buildings and improvements	9	488	—	—	—	—	—	—	—
Nuclear fuel		3,253	1,891	1,362	1,362	—	—	—	—
Equipment	13	2,313	546	665	452	213	319	205	128
Construction in process		6,102	1,389	2,149	1,114	1,035	504	381	531
Other	13	4,916	1,139	1,467	1,046	411	269	292	304
Total property, plant and equipment[(a)(e)]		147,654	48,922	55,070	34,603	20,457	10,241	16,305	8,446
Total accumulated depreciation – regulated[(b)(c)]		(43,419)	(16,525)	(17,159)	(11,915)	(5,236)	(2,843)	(5,233)	(1,681)
Total accumulated depreciation – nonregulated[(d)(e)]		(2,354)	—	—	—	—	—	—	—
Generation facilities to be retired, net		246	—	246	246	—	—	—	—
Total net property, plant and equipment		$ 102,127	$ 32,397	$ 38,157	$ 22,934	$ 15,221	$ 7,398	$ 11,072	$ 6,765

(a) Includes finance leases of $952 million, $211 million, $443 million, $308 million, $135 million, and $10 million at Duke Energy, Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana, respectively, primarily within Plant – Regulated. The Progress Energy, Duke Energy Progress and Duke Energy Florida amounts are net of $143 million, $17 million and $126 million, respectively, of accumulated amortization of finance leases.

(b) Includes $1,807 million, $1,082 million, $725 million and $725 million of accumulated amortization of nuclear fuel at Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.

(c) Includes accumulated amortization of finance leases of $6 million, $13 million, and $3 million at Duke Energy, Duke Energy Carolinas and Duke Energy Indiana, respectively.

(d) Includes accumulated amortization of finance leases of $20 million at Duke Energy.

(e) Includes gross property, plant and equipment cost of consolidated VIEs of $5,747 million and accumulated depreciation of consolidated VIEs of $1,041 million at Duke Energy.

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

	Years Ended December 31,		
(in millions)	2020	2019	2018
Duke Energy	**$112**	$159	$161
Duke Energy Carolinas	**28**	30	35
Progress Energy	**17**	31	51
Duke Energy Progress	**12**	28	26
Duke Energy Florida	**5**	3	25
Duke Energy Ohio	**26**	22	17
Duke Energy Indiana	**10**	26	27
Piedmont	**8**	26	17

11. GOODWILL AND INTANGIBLE ASSETS

GOODWILL

Duke Energy

The following table presents goodwill by reportable segment for Duke Energy included on Duke Energy's Consolidated Balance Sheets at December 31, 2020, and 2019.

(in millions)	Electric Utilities and Infrastructure	Gas Utilities and Infrastructure	Commercial Renewables	Total
Goodwill Balance at December 31, 2019	$ 17,379	$ 1,924	$ 122	$ 19,425
Accumulated impairment charges	—	—	(122)	(122)
Goodwill balance at December 31, 2019, adjusted for accumulated impairment charges	$ 17,379	$ 1,924	$ —	$ 19,303
Goodwill Balance at December 31, 2020	**$ 17,379**	**$ 1,924**	**$ 122**	**$ 19,425**
Accumulated impairment charges	**—**	**—**	**(122)**	**(122)**
Goodwill balance at December 31, 2020, adjusted for accumulated impairment charges	**$ 17,379**	**$ 1,924**	**$ —**	**$ 19,303**

(a) Duke Energy evaluated the recoverability of goodwill during 2018 and 2017 and recorded impairment charges of $93 million and $29 million, respectively, related to the Commercial Renewables reporting unit included in Impairment charges on Duke Energy's Consolidated Statements of Operations. The fair value of the reporting unit was determined based on the income approach and market approach in 2018 and 2017, respectively. See "Goodwill Impairment Testing" below for the results of the 2020 goodwill impairment test.

Duke Energy Ohio

Duke Energy Ohio's Goodwill balance of $920 million, allocated $596 million to Electric Utilities and Infrastructure and $324 million to Gas Utilities and Infrastructure, is presented net of accumulated impairment charges of $216 million on the Consolidated Balance Sheets at December 31, 2020, and 2019.

Progress Energy

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

Piedmont

Piedmont's Goodwill is included in the Gas Utilities and Infrastructure segment and there are no accumulated impairment charges.

Goodwill Impairment Testing

Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont are required to perform an annual goodwill impairment test as of the same date each year and, accordingly, perform their annual impairment testing of goodwill as of August 31. Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont update their test between annual tests if events or circumstances occur that would more likely than not reduce the fair value of a reporting unit below its carrying value. As the fair value for Duke Energy, Progress Energy, Duke Energy Ohio and Piedmont exceeded their respective carrying values at the date of the annual impairment analysis, no goodwill impairment charges were recorded in 2020.

INTANGIBLE ASSETS

The following tables show the carrying amount and accumulated amortization of intangible assets included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets of the Duke Energy Registrants at December 31, 2020, and 2019.

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Emission allowances	$ 8	$ —	$ 5	$ 2	$ 3	$ —	$ 2	$ —
Renewable energy certificates	196	65	130	130	—	1	—	—
Natural gas, coal and power contracts	24	—	—	—	—	—	24	—
Renewable operating and development projects	107	—	—	—	—	—	—	—
Other	20	—	—	—	—	—	—	—
Total gross carrying amounts	355	65	135	132	3	1	26	—
Accumulated amortization – natural gas, coal and power contracts	(23)	—	—	—	—	—	(23)	—
Accumulated amortization – renewable operating and development projects	(34)	—	—	—	—	—	—	—
Accumulated amortization – other	(3)	—	—	—	—	—	—	—
Total accumulated amortization	(60)	—	—	—	—	—	(23)	—
Total intangible assets, net	$ 295	$ 65	$135	$ 132	$ 3	$ 1	$ 3	$ —

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

Amortization Expense

Amortization expense amounts for natural gas, coal and power contracts, renewable operating projects and other intangible assets are immaterial for the years ended December 31, 2020, 2019 and 2018, and are expected to be immaterial for the next five years as of December 31, 2020.

12. INVESTMENTS IN UNCONSOLIDATED AFFILIATES

EQUITY METHOD INVESTMENTS

Investments in affiliates that are not controlled by Duke Energy, but over which it has significant influence, are accounted for using the equity method.

The following table presents Duke Energy's investments in unconsolidated affiliates accounted for under the equity method, as well as the respective equity in earnings, by segment.

	Years Ended December 31,					
	2020		2019		2018	
(in millions)	Investments	Equity in earnings	Investments	Equity in earnings	Investments	Equity in earnings
Electric Utilities and Infrastructure	**$ 105**	**$ (1)**	$ 122	$ 9	$ 97	$ 6
Gas Utilities and Infrastructure	**215**	**(2,017)**	1,388	114	1,003	27
Commercial Renewables	**534**	**—**	314	(4)	201	(1)
Other	**107**	**13**	112	43	108	51
Total	**$ 961**	**$ (2,005)**	$ 1,936	$ 162	$ 1,409	$ 83

During the years ended December 31, 2020, 2019 and 2018, Duke Energy received distributions from equity investments of $37 million, $55 million and $108 million, respectively, which are included in Other assets within Cash Flows from Operating Activities on the Consolidated Statements of Cash Flows. During the years ended December 31, 2020, 2019 and 2018, Duke Energy received distributions from equity investments of $133 million, $11 million and $137 million, respectively, which are included in Return of investment capital within Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows.

During the years ended December 31, 2020, 2019 and 2018, Piedmont received distributions from equity investments of $2 million, $1 million and $1 million, respectively, which are included in Other assets within Cash Flows from Operating Activities and $2 million, $4 million and $3 million, respectively, which are included within Cash Flows from Investing Activities on the Consolidated Statements of Cash Flows.

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

Electric Utilities and Infrastructure

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

Gas Utilities and Infrastructure

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

		Investment Amount (in millions)	
	Ownership	December 31,	
Entity Name	**Interest**	**2020**	**2019**
Pipeline Investments[a]			
ACP[b]	47%	$ —	$ 1,179
Sabal Trail	7.5%	120	121
Cardinal[c]	21.49%	9	9
Storage Facilities			
Pine Needle[c]	45%	27	28
Hardy Storage[c]	50%	56	51
Other	29.68%	3	—
Total Investments[d]		$ 215	$ 1,388

(a) Duke Energy recorded OTTIs of $25 million and $55 million within Equity in (losses) earnings of unconsolidated affiliates on Duke Energy's Consolidated Statements of Operations for the years ended December 31, 2019, and 2018, respectively, to completely impair its 24% ownership interest in Constitution.

(b) In 2020, Duke Energy determined it would no longer continue its investment in the construction of the ACP pipeline. See Notes 3 and 7 for further information.

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

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

Commercial Renewables

DS Cornerstone, LLC, which owns wind farm projects in the U.S. was part of a sale of minority interest in a certain portion of renewable assets in 2019. See Note 1 for more information on the sale. Prior to the sale, Duke Energy had a 50% interest in DS Cornerstone, LLC. After the sale, Duke Energy has a 26% interest in the investment.

As of December 31, 2020, Duke Energy completed its acquisition of 70 distributed fuel cell projects from Bloom Energy Corporation, which approximates 43 MW of capacity serving commercial and industrial customers across the U.S. Duke Energy is not the primary beneficiary of the distributed fuel cell portfolio and does not consolidate these assets.

Other

Duke Energy has a 17.5% indirect economic ownership interest and 25% board representation and voting rights interest in NMC, which owns and operates a methanol and MTBE business in Jubail, Saudi Arabia.

Significant Subsidiaries

For the year ended December 31, 2020, Duke Energy's investment in ACP met the requirements of S-X Rule 4-08(g) to provide summarized financial information. The following table provides summary information for ACP as required under S-X Rule 1-02(bb) for the comparative periods in Duke Energy's consolidated balance sheets and consolidated statements of operations.

	December 31,	
(in millions)	**2020**	**2019**
Current assets	$ 43	$ 17
Noncurrent assets	93	4,091
Current liabilities	1,965	37
Noncurrent liabilities	167	1,760
Membership interests	(1,996)	2,311

	Years Ended December 31,		
	2020	**2019**	**2018**
Net revenues	$ —	$ —	$ —
Operating loss	(4,612)	(5)	(6)
Net (loss) income	(4,512)	246	138
Net (loss) income attributable to Duke Energy	$ (2,121)	$ 116	$ 65

13. RELATED PARTY TRANSACTIONS

The Subsidiary Registrants engage in related party transactions in accordance with the applicable state and federal commission regulations. Refer to the Consolidated Balance Sheets of the Subsidiary Registrants for balances due to or due from related parties. Material amounts related to transactions with related parties included in the Consolidated Statements of Operations and Comprehensive Income are presented in the following table.

	Years Ended December 31,		
(in millions)	2020	2019	2018
Duke Energy Carolinas			
Corporate governance and shared service expenses[(a)]	$ 753	$ 841	$ 985
Indemnification coverages[(b)]	20	20	22
Joint Dispatch Agreement (JDA) revenue[(c)]	25	60	84
JDA expense[(c)]	114	186	207
Intercompany natural gas purchases[(d)]	15	15	15
Progress Energy			
Corporate governance and shared service expenses[(a)]	$ 715	$ 778	$ 906
Indemnification coverages[(b)]	36	37	34
JDA revenue[(c)]	114	186	207
JDA expense[(c)]	25	60	84
Intercompany natural gas purchases[(d)]	75	76	78
Duke Energy Progress			
Corporate governance and shared service expenses[(a)]	$ 420	$ 462	$ 577
Indemnification coverages[(b)]	17	15	13
JDA revenue[(c)]	114	186	207
JDA expense[(c)]	25	60	84
Intercompany natural gas purchases[(d)]	75	76	78
Duke Energy Florida			
Corporate governance and shared service expenses[(a)]	$ 295	$ 316	$ 329
Indemnification coverages[(b)]	19	22	21
Duke Energy Ohio			
Corporate governance and shared service expenses[(a)]	$ 326	$ 354	$ 374
Indemnification coverages[(b)]	4	4	5
Duke Energy Indiana			
Corporate governance and shared service expenses[(a)]	$ 401	$ 412	$ 405
Indemnification coverages[(b)]	8	7	7

	Years Ended December 31,		
(in millions)	2020	2019	2018
Piedmont			
Corporate governance and shared service expenses[(a)]	$ 140	$ 138	$ 170
Indemnification coverages[(b)]	3	3	2
Intercompany natural gas sales[(d)]	90	91	93
Natural gas storage and transportation costs[(e)]	23	23	25

(a) The Subsidiary Registrants are charged their proportionate share of corporate governance and other shared services costs, primarily related to human resources, employee benefits, information technology, legal and accounting fees, as well as other third-party costs. These amounts are primarily recorded in Operation, maintenance and other on the Consolidated Statements of Operations and Comprehensive Income.

(b) The Subsidiary Registrants incur expenses related to certain indemnification coverages through Bison, Duke Energy's wholly owned captive insurance subsidiary. These expenses are recorded in Operation, maintenance and other on the Consolidated Statements of Operations and Comprehensive Income.

(c) Duke Energy Carolinas and Duke Energy Progress participate in a JDA, which allows the collective dispatch of power plants between the service territories to reduce customer rates. Revenues from the sale of power and expenses from the purchase of power pursuant to the JDA are recorded in Operating Revenues and Fuel used in electric generation and purchased power, respectively, on the Consolidated Statements of Operations and Comprehensive Income.

(d) Piedmont provides long-term natural gas delivery service to certain Duke Energy Carolinas and Duke Energy Progress natural gas-fired generation facilities. Piedmont records the sales in Operating Revenues, and Duke Energy Carolinas and Duke Energy Progress record the related purchases as a component of Fuel used in electric generation and purchased power on their respective Consolidated Statements of Operations and Comprehensive Income. These intercompany revenues and expenses are eliminated in consolidation.

(e) Piedmont has related party transactions as a customer of its equity method investments in Pine Needle, Hardy Storage, and Cardinal natural gas storage and transportation facilities. These expenses are included in Cost of natural gas on Piedmont's Consolidated Statements of Operations and Comprehensive Income.

In addition to the amounts presented above, the Subsidiary Registrants have other affiliate transactions, including rental of office space, participation in a money pool arrangement, other operational transactions and their proportionate share of certain charged expenses. See Note 6 for more information regarding money pool. These transactions of the Subsidiary Registrants are incurred in the ordinary course of business and are eliminated in consolidation.

As discussed in Note 17, certain trade receivables have been sold by Duke Energy Ohio and Duke Energy Indiana to CRC, an affiliate formed by a subsidiary of Duke Energy. The proceeds obtained from the sales of receivables are largely cash but do include a subordinated note from CRC for a portion of the purchase price.

Intercompany Income Taxes

Duke Energy and the Subsidiary Registrants file a consolidated federal income tax return and other state and jurisdictional returns. The Subsidiary Registrants have a tax sharing agreement with Duke Energy for the allocation of consolidated tax liabilities and benefits. Income taxes recorded represent amounts the Subsidiary Registrants would incur as separate C-Corporations. The following table includes the balance of intercompany income tax receivables and payables for the Subsidiary Registrants.

(in millions)	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
December 31, 2020							
Intercompany income tax receivable	$ —	$ —	$ —	$ —	$ —	$ 9	$ 10
Intercompany income tax payable	31	33	46	35	2	—	—
December 31, 2019							
Intercompany income tax receivable	$ —	$125	$ 28	$ —	$ 9	$ 28	$ 13
Intercompany income tax payable	5	—	—	2	—	—	—

14. DERIVATIVES AND HEDGING

The Duke Energy Registrants use commodity and interest rate contracts to manage commodity price risk and interest rate risk. The primary use of commodity derivatives is to hedge the generation portfolio against changes in the prices of electricity and natural gas. Piedmont enters into natural gas supply contracts to provide diversification, reliability and natural gas cost benefits to its customers. Interest rate derivatives are used to manage interest rate risk associated with borrowings.

All derivative instruments not identified as NPNS are recorded at fair value as assets or liabilities on the Consolidated Balance Sheets. Cash collateral related to derivative instruments executed under master netting arrangements is offset against the collateralized derivatives on the Consolidated Balance Sheets. The cash impacts of settled derivatives are recorded as operating activities on the Consolidated Statements of Cash Flows.

INTEREST RATE RISK

The Duke Energy Registrants are exposed to changes in interest rates as a result of their issuance or anticipated issuance of variable-rate and fixed-rate debt and commercial paper. Interest rate risk is managed by limiting variable-rate exposures to a percentage of total debt and by monitoring changes in interest rates. To manage risk associated with changes in interest rates, the Duke Energy Registrants may enter into interest rate swaps, U.S. Treasury lock agreements and other financial contracts. In anticipation of certain fixed-rate debt issuances, a series of forward-starting interest rate swaps or Treasury locks may be executed to lock in components of current market interest rates. These instruments are later terminated prior to or upon the issuance of the corresponding debt.

Cash Flow Hedges

For a derivative designated as hedging the exposure to variable cash flows of a future transaction, referred to as a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of other comprehensive income and subsequently reclassified into earnings once the future transaction impacts earnings. Amounts for interest rate contracts are reclassified to earnings as interest expense over the term of the related debt. Gains and losses reclassified out of AOCI for the years ended December 31, 2020, 2019 and 2018, were not material. Duke Energy's interest rate derivatives designated as hedges include interest rate swaps used to hedge existing debt within the Commercial Renewables segment and forward-starting interest rate swaps not accounted for under regulatory accounting.

Undesignated Contracts

Undesignated contracts primarily include contracts not designated as a hedge because they are accounted for under regulatory accounting or contracts that do not qualify for hedge accounting.

Duke Energy's interest rate swaps for its regulated operations employ regulatory accounting. With regulatory accounting, the mark-to-market gains or losses on the swaps are deferred as regulatory liabilities or regulatory assets, respectively. Regulatory assets and liabilities are amortized consistent with the treatment of the related costs in the ratemaking process. The accrual of interest on the swaps is recorded as Interest Expense on the Duke Energy Registrant's Consolidated Statements of Operations and Comprehensive Income.

The following tables show notional amounts of outstanding derivatives related to interest rate risk.

	December 31, 2020					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio
Cash flow hedges	$ 632	$ —	$ —	$ —	$ —	$ —
Undesignated contracts	1,177	400	750	750	—	27
Total notional amount[(a)]	$ 1,809	$ 400	$ 750	$ 750	$ —	$ 27

	December 31, 2019					
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio
Cash flow hedges	$ 993	$ —	$ —	$ —	$ —	$ —
Undesignated contracts	1,277	450	800	250	550	27
Total notional amount[(a)]	$ 2,270	$ 450	$ 800	$ 250	$ 550	$ 27

(a) Duke Energy includes amounts related to consolidated VIEs of $632 million in cash flow hedges as of December 31, 2020, and $693 million in cash flow hedges as of December 31, 2019.

COMMODITY PRICE RISK

The Duke Energy Registrants are exposed to the impact of changes in the prices of electricity purchased and sold in bulk power markets and natural gas purchases, including Piedmont's natural gas supply contracts. Exposure to commodity price risk is influenced by a number of factors including the term of contracts, the liquidity of markets and delivery locations. To manage risk associated with commodity prices, the Duke Energy Registrants may enter into long-term power purchase or sales contracts and long-term natural gas supply agreements.

Cash Flow Hedges

For derivatives designated as hedging the exposure to variable cash flows of a future transaction, referred to as a cash flow hedge, the derivative's gain or loss is initially reported as a component of other comprehensive income and subsequently reclassified into earnings once the future transaction impacts earnings. Gains and losses reclassified out of accumulated other comprehensive income (loss) for the year ended December 31, 2020, 2019 and 2018, were not material. Duke Energy's commodity derivatives designated as hedges include long-term electricity sales in the Commercial Renewables segment.

Undesignated Contracts

For the Subsidiary Registrants, bulk power electricity and natural gas purchases flow through fuel adjustment clauses, formula-based contracts or other cost sharing mechanisms. Differences between the costs included in rates and the incurred costs, including undesignated derivative contracts, are largely deferred as regulatory assets or regulatory liabilities. Piedmont policies allow for the use of financial instruments to hedge commodity price risks. The strategy and objective of these hedging programs are to use the financial instruments to reduce gas cost volatility for customers.

Volumes

The tables below include volumes of outstanding commodity derivatives. Amounts disclosed represent the absolute value of notional volumes of commodity contracts excluding NPNS. The Duke Energy Registrants have netted contractual amounts where offsetting purchase and sale contracts exist with identical delivery locations and times of delivery. Where all commodity positions are perfectly offset, no quantities are shown.

	December 31, 2020						
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electricity (GWh)[(a)]	35,409	—	—	—	2,559	10,802	—
Natural gas (millions of Dth)	678	145	158	158	—	2	373

	December 31, 2019						
	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electricity (GWh)	15,858	—	—	—	1,887	13,971	—
Natural gas (millions of Dth)	704	130	160	160	—	3	411

(a) Duke Energy includes 22,048 GWh that relates to cash flow hedges.

LOCATION AND FAIR VALUE OF DERIVATIVE ASSETS AND LIABILITIES RECOGNIZED IN THE CONSOLIDATED BALANCE SHEETS

The following tables show the fair value and balance sheet location of derivative instruments. Although derivatives subject to master netting arrangements are netted on the Consolidated Balance Sheets, the fair values presented below are shown gross and cash collateral on the derivatives has not been netted against the fair values shown.

Derivative Assets	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Not Designated as Hedging Instruments								
Current	$ 30	$ 14	$ 9	$ 9	$ —	$ 1	$ 6	$ 1
Noncurrent	13	6	6	6	—	—	—	—
Total Derivative Assets – Commodity Contracts	$ 43	$ 20	$ 15	$ 15	$ —	$ 1	$ 6	$ 1
Interest Rate Contracts								
Not Designated as Hedging Instruments								
Current	$ 18	$ —	$ 18	$ 18	$ —	$ —	$ —	$ —
Total Derivative Assets – Interest Rate Contracts	$ 18	$ —	$ 18	$ 18	$ —	$ —	$ —	$ —
Total Derivative Assets	$ 61	$ 20	$ 33	$ 33	$ —	$ 1	$ 6	$ 1

Combined Notes to Consolidated Financial Statements – (Continued)

Derivative Liabilities	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Designated as Hedging Instruments								
Current	$ 14	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Noncurrent	70	—	—	—	—	—	—	—
Not Designated as Hedging Instruments								
Current	$ 30	$ 13	$ 2	$ 2	$ —	$ —	$ 1	$ 15
Noncurrent	137	3	27	12	—	—	—	107
Total Derivative Liabilities – Commodity Contracts	$ 251	$ 16	$ 29	$ 14	$ —	$ —	$ 1	$ 122
Interest Rate Contracts								
Designated as Hedging Instruments								
Current	$ 15	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Noncurrent	48	—	—	—	—	—	—	—
Not Designated as Hedging Instruments								
Current	5	4	—	—	—	1	—	—
Noncurrent	5	—	—	—	—	5	—	—
Total Derivative Liabilities – Interest Rate Contracts	$ 73	$ 4	$ —	$ —	$ —	$ 6	$ —	$ —
Total Derivative Liabilities	$ 324	$ 20	$ 29	$ 14	$ —	$ 6	$ 1	$ 122

Derivative Assets	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Commodity Contracts								
Not Designated as Hedging Instruments								
Current	$ 17	$ —	$ —	$ —	$ —	$ 3	$ 13	$ 1
Noncurrent	1	—	—	—	—	1	—	—
Total Derivative Assets – Commodity Contracts	$ 18	$ —	$ —	$ —	$ —	$ 4	$ 13	$ 1
Interest Rate Contracts								
Not Designated as Hedging Instruments								
Current	6	—	6	—	6	—	—	—
Total Derivative Assets – Interest Rate Contracts	$ 6	$ —	$ 6	$ —	$ 6	$ —	$ —	$ —
Equity Securities Contracts								
Not Designated as Hedging Instruments								
Current	$ 1	$ —	$ 1	$ —	$ 1	$ —	$ —	$ —
Total Derivative Assets – Equity Securities Contracts	$ 1	$ —	$ 1	$ —	$ 1	$ —	$ —	$ —
Total Derivative Assets	$ 25	$ —	$ 7	$ —	$ 7	$ 4	$ 13	$ 1

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

OFFSETTING ASSETS AND LIABILITIES

The following tables present the line items on the Consolidated Balance Sheets where derivatives are reported. Substantially all of Duke Energy's outstanding derivative contracts are subject to enforceable master netting arrangements. The gross amounts offset in the tables below show the effect of these netting arrangements on financial position and include collateral posted to offset the net position. The amounts shown are calculated by counterparty. Accounts receivable or accounts payable may also be available to offset exposures in the event of bankruptcy. These amounts are not included in the tables below.

Derivative Assets	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 48	$ 14	$ 27	$ 27	$ —	$ 1	$ 6	$ 1
Gross amounts offset	(3)	(2)	(2)	(2)	—	—	—	—
Net amounts presented in Current Assets: Other	$ 45	$ 12	$ 25	$ 25	$ —	$ 1	$ 6	$ 1
Noncurrent								
Gross amounts recognized	$ 13	$ 6	$ 6	$ 6	$ —	$ —	$ —	$ —
Gross amounts offset	(5)	(1)	(4)	(4)	—	—	—	—
Net amounts presented in Other Noncurrent Assets: Other	$ 8	$ 5	$ 2	$ 2	$ —	$ —	$ —	$ —

Derivative Liabilities	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 64	$ 17	$ 2	$ 2	$ —	$ 1	$ 1	$ 15
Gross amounts offset	(3)	(2)	(2)	(2)	—	—	—	—
Net amounts presented in Current Liabilities: Other	$ 61	$ 15	$ —	$ —	$ —	$ 1	$ 1	$ 15
Noncurrent								
Gross amounts recognized	$ 260	$ 3	$ 27	$ 12	$ —	$ 5	$ —	$ 107
Gross amounts offset	(5)	(1)	(4)	(4)	—	—	—	—
Net amounts presented in Other Noncurrent Liabilities: Other	$ 255	$ 2	$ 23	$ 8	$ —	$ 5	$ —	$ 107

Derivative Assets	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 24	$ —	$ 7	$ —	$ 7	$ 3	$ 13	$ 1
Gross amounts offset	(1)	—	(1)	—	(1)	—	—	—
Net amounts presented in Current Assets: Other	$ 23	$ —	$ 6	$ —	$ 6	$ 3	$ 13	$ 1
Noncurrent								
Gross amounts recognized	$ 1	$ —	$ —	$ —	$ —	$ 1	$ —	$ —
Gross amounts offset	—	—	—	—	—	—	—	—
Net amounts presented in Other Noncurrent Assets: Other	$ 1	$ —	$ —	$ —	$ —	$ 1	$ —	$ —

Derivative Liabilities	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current								
Gross amounts recognized	$ 118	$ 39	$ 51	$ 27	$ 24	$ 1	$ 1	$ 7
Gross amounts offset	(24)	—	(24)	—	(24)	—	—	—
Net amounts presented in Current Liabilities: Other	$ 94	$ 39	$ 27	$ 27	$ —	$ 1	$ 1	$ 7
Noncurrent								
Gross amounts recognized	$ 182	$ 10	$ 37	$ 22	$ —	$ 5	$ —	$ 110
Gross amounts offset	—	—	—	—	—	—	—	—
Net amounts presented in Other Noncurrent Liabilities: Other	$ 182	$ 10	$ 37	$ 22	$ —	$ 5	$ —	$ 110

OBJECTIVE CREDIT CONTINGENT FEATURES

Certain derivative contracts contain objective credit contingent features. These features include the requirement to post cash collateral or letters of credit if specific events occur, such as a credit rating downgrade below investment grade. The following tables show information with respect to derivative contracts that are in a net liability position and contain objective credit-risk-related payment provisions.

	December 31, 2020			
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress
Aggregate fair value of derivatives in a net liability position	$ 24	$ 9	$ 14	$ 14
Fair value of collateral already posted	—	—	—	—
Additional cash collateral or letters of credit in the event credit-risk-related contingent features were triggered	24	9	14	14

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

The Duke Energy Registrants have elected to offset cash collateral and fair values of derivatives. For amounts to be netted, the derivative and cash collateral must be executed with the same counterparty under the same master netting arrangement.

15. INVESTMENTS IN DEBT AND EQUITY SECURITIES

Duke Energy's investments in debt and equity securities are primarily comprised of investments held in (i) the NDTF at Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, (ii) the grantor trusts at Duke Energy Progress, Duke Energy Florida and Duke Energy Indiana related to OPEB plans and (iii) Bison. The Duke Energy Registrants classify investments in debt securities as AFS and investments in equity securities as FV-NI.

For investments in debt securities classified as AFS, the unrealized gains and losses are included in other comprehensive income until realized, at which time they are reported through net income. For investments in equity securities classified as FV-NI, both realized and unrealized gains and losses are reported through net income. Substantially all of Duke Energy's investments in debt and equity securities qualify for regulatory accounting, and accordingly, all associated realized and unrealized gains and losses on these investments are deferred as a regulatory asset or liability.

Duke Energy classifies the majority of investments in debt and equity securities as long term, unless otherwise noted.

Investment Trusts

The investments within the Investment Trusts are managed by independent investment managers with discretion to buy, sell and invest pursuant to the objectives set forth by the investment manager agreements and trust agreements. The Duke Energy Registrants have limited oversight of the day-to-day management of these investments. As a result, the ability to hold investments in unrealized loss positions is outside the control of the Duke Energy Registrants. Accordingly, all unrealized losses associated with debt securities within the Investment Trusts are recognized immediately and deferred to regulatory accounts where appropriate.

Other AFS Securities

Unrealized gains and losses on all other AFS securities are included in other comprehensive income until realized, unless it is determined the carrying value of an investment has a credit loss. The Duke Energy Registrants analyze all investment holdings each reporting period to determine whether a decline in fair value is related to a credit loss. If a credit loss exists, the unrealized credit loss is included in earnings. There were no material credit losses as of December 31, 2020, and 2019.

Other Investments amounts are recorded in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.

DUKE ENERGY

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	$ —	$ —	$ 177	$ —	$ —	$ 101
Equity securities	4,138	54	6,235	3,523	55	5,661
Corporate debt securities	76	1	806	37	1	603
Municipal bonds	22	—	370	13	—	368
U.S. government bonds	51	—	1,361	33	1	1,256
Other debt securities	8	—	180	3	—	141
Total NDTF Investments	$ 4,295	$ 55	$ 9,129	$ 3,609	$ 57	$ 8,130
Other Investments						
Cash and cash equivalents	$ —	$ —	$ 127	$ —	$ —	$ 52
Equity securities	79	—	146	57	—	122
Corporate debt securities	8	—	110	3	—	67
Municipal bonds	5	—	86	4	—	94
U.S. government bonds	—	—	42	2	—	41
Other debt securities	—	—	47	—	—	56
Total Other Investments	$ 92	$ —	$ 558	$ 66	$ —	$ 432
Total Investments	$ 4,387	$ 55	$ 9,687	$ 3,675	$ 57	$ 8,562

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 149
Due after one through five years	922
Due after five through 10 years	671
Due after 10 years	1,260
Total	$ 3,002

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were as follows.

	Years Ended December 31,		
(in millions)	2020	2019	2018
FV-NI:			
Realized gains	$ 366	$ 172	$ 168
Realized losses	174	151	126
AFS:			
Realized gains	96	94	22
Realized losses	51	67	51

DUKE ENERGY CAROLINAS

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	$ —	$ —	$ 30	$ —	$ —	$ 21
Equity securities	2,442	23	3,685	1,914	8	3,154
Corporate debt securities	49	1	510	21	1	361
Municipal bonds	6	—	91	3	—	96
U.S. government bonds	25	—	475	16	1	578
Other debt securities	7	—	174	3	—	137
Total NDTF Investments	$ 2,529	$ 24	$ 4,965	$ 1,957	$ 10	$ 4,347

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 14
Due after one through five years	299
Due after five through 10 years	279
Due after 10 years	658
Total	$ 1,250

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were as follows.

	Years Ended December 31,		
(in millions)	2020	2019	2018
FV-NI:			
Realized gains	$ 64	$ 113	$ 89
Realized losses	99	107	73
AFS:			
Realized gains	60	55	19
Realized losses	37	38	35

PROGRESS ENERGY

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	$ —	$ —	$ 147	$ —	$ —	$ 80
Equity securities	1,696	31	2,550	1,609	47	2,507
Corporate debt securities	27	—	296	16	—	242
Municipal bonds	16	—	279	10	—	272
U.S. government bonds	26	—	886	17	—	678
Other debt securities	1	—	6	—	—	4
Total NDTF Investments	$ 1,766	$ 31	$ 4,164	$ 1,652	$ 47	$ 3,783
Other Investments						
Cash and cash equivalents	$ —	$ —	$ 106	$ —	$ —	$ 49
Municipal bonds	3	—	26	3	—	51
Total Other Investments	$ 3	$ —	$ 132	$ 3	$ —	$ 100
Total Investments	$ 1,769	$ 31	$ 4,296	$ 1,655	$ 47	$ 3,883

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 109
Due after one through five years	567
Due after five through 10 years	298
Due after 10 years	519
Total	$ 1,493

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were as follows.

	Years Ended December 31,		
(in millions)	2020	2019	2018
FV-NI:			
Realized gains	$ 302	$ 59	$ 79
Realized losses	75	44	53
AFS:			
Realized gains	24	36	3
Realized losses	13	29	15

DUKE ENERGY PROGRESS

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	$ —	$ —	$ 76	$ —	$ —	$ 53
Equity securities	1,617	31	2,459	1,258	21	2,077
Corporate debt securities	27	—	296	16	—	242
Municipal bonds	16	—	279	10	—	272
U.S. government bonds	26	—	412	16	—	403
Other debt securities	1	—	6	—	—	4
Total NDTF Investments	$ 1,687	$ 31	$ 3,528	$ 1,300	$ 21	$ 3,051
Other Investments						
Cash and cash equivalents	$ —	$ —	$ 1	$ —	$ —	$ 2
Total Other Investments	$ —	$ —	$ 1	$ —	$ —	$ 2
Total Investments	$ 1,687	$ 31	$ 3,529	$ 1,300	$ 21	$ 3,053

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 21
Due after one through five years	259
Due after five through 10 years	210
Due after 10 years	503
Total	$ 993

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were as follows.

	Years Ended December 31,		
(in millions)	2020	2019	2018
FV-NI:			
Realized gains	$ 52	$ 38	$ 68
Realized losses	59	33	48
AFS:			
Realized gains	24	7	2
Realized losses	13	5	10

DUKE ENERGY FLORIDA

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are classified as FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
NDTF						
Cash and cash equivalents	$ —	$ —	$ 71	$ —	$ —	$ 27
Equity securities	79	—	91	351	26	430
U.S. government bonds	—	—	474	1	—	275
Total NDTF Investments[(a)]	$ 79	$ —	$ 636	$ 352	$ 26	$ 732
Other Investments						
Cash and cash equivalents	$ —	$ —	$ 1	$ —	$ —	$ 4
Municipal bonds	3	—	26	3	—	51
Total Other Investments	$ 3	$ —	$ 27	$ 3	$ —	$ 55
Total Investments	$ 82	$ —	$ 663	$ 355	$ 26	$ 787

(a) During the years ended December 31, 2020, and 2019, Duke Energy Florida continued to receive reimbursements from the NDTF for costs related to ongoing decommissioning activity of the Crystal River Unit 3.

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 88
Due after one through five years	308
Due after five through 10 years	88
Due after 10 years	16
Total	$ 500

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were as follows.

	Years Ended December 31,		
(in millions)	2020	2019	2018
FV-NI:			
Realized gains	$ 250	$ 21	$ 11
Realized losses	16	11	5
AFS:			
Realized gains	—	29	1
Realized losses	—	24	5

DUKE ENERGY INDIANA

The following table presents the estimated fair value of investments in debt and equity securities; equity investments are measured at FV-NI and debt investments are classified as AFS.

	December 31, 2020			December 31, 2019		
(in millions)	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Estimated Fair Value
Investments						
Cash and cash equivalents	$ —	$ —	$ 1	$ —	$ —	$ —
Equity securities	58	—	97	43	—	81
Corporate debt securities	—	—	3	—	—	6
Municipal bonds	1	—	38	1	—	36
U.S. government bonds	—	—	4	—	—	2
Total Investments	$ 59	$ —	$ 143	$ 44	$ —	$ 125

The table below summarizes the maturity date for debt securities.

(in millions)	December 31, 2020
Due in one year or less	$ 3
Due after one through five years	17
Due after five through 10 years	10
Due after 10 years	15
Total	$ 45

Realized gains and losses, which were determined on a specific identification basis, from sales of FV-NI and AFS securities for the years ended December 31, 2020, 2019 and 2018, were immaterial.

16. FAIR VALUE MEASUREMENTS

Fair value is the exchange price to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The fair value definition focuses on an exit price versus the acquisition cost. Fair value measurements use market data or assumptions market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs may be readily observable, corroborated by market data, or generally unobservable. Valuation techniques maximize the use of observable inputs and minimize use of unobservable inputs. A midmarket pricing convention (the midpoint price between bid and ask prices) is permitted for use as a practical expedient.

Fair value measurements are classified in three levels based on the fair value hierarchy as defined by GAAP. Certain investments are not categorized within the fair value hierarchy. These investments are measured at fair value using the net asset value per share practical expedient. The net asset value is derived based on the investment cost, less any impairment, plus or minus changes resulting from observable price changes for an identical or similar investment of the same issuer.

Fair value accounting guidance permits entities to elect to measure certain financial instruments that are not required to be accounted for at fair value, such as equity method investments or the company's own debt, at fair value. The Duke Energy Registrants have not elected to record any of these items at fair value.

Valuation methods of the primary fair value measurements disclosed below are as follows.

Investments in equity securities

The majority of investments in equity securities are valued using Level 1 measurements. Investments in equity securities are typically valued at the closing price in the principal active market as of the last business day of the quarter. Principal active markets for equity prices include published exchanges such as the NYSE and Nasdaq Stock Market. Foreign equity prices are translated from their trading currency using the currency exchange rate in effect at the close of the principal active market. There was no after-hours market activity that was required to be reflected in the reported fair value measurements.

Investments in debt securities

Most investments in debt securities are valued using Level 2 measurements because the valuations use interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating. If the market for a particular fixed-income security is relatively inactive or illiquid, the measurement is Level 3.

Commodity derivatives

Commodity derivatives with clearinghouses are classified as Level 1. Commodity derivatives with observable forward curves are classified as Level 2. If forward price curves are not observable for the full term of the contract and the unobservable period had more than an insignificant impact on the valuation, the commodity derivative is classified as Level 3. In isolation, increases (decreases) in natural gas forward prices result in favorable (unfavorable) fair value adjustments for natural gas purchase contracts; and increases (decreases) in electricity forward prices result in unfavorable (favorable) fair value adjustments for electricity sales contracts. Duke Energy regularly evaluates and validates pricing inputs used to estimate the fair value of natural gas commodity contracts by a market participant price verification procedure. This procedure provides a comparison of internal forward commodity curves to market participant generated curves.

Interest rate derivatives

Most over-the-counter interest rate contract derivatives are valued using financial models that utilize observable inputs for similar instruments and are classified as Level 2. Inputs include forward interest rate curves, notional amounts, interest rates and credit quality of the counterparties.

Other fair value considerations

See Note 11 for a discussion of the valuation of goodwill and intangible assets.

DUKE ENERGY

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets. Derivative amounts in the tables below for all Duke Energy Registrants exclude cash collateral, which is disclosed in Note 14. See Note 15 for additional information related to investments by major security type for the Duke Energy Registrants.

	December 31, 2020				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized**
NDTF cash and cash equivalents	$ 177	$ 177	$ —	$ —	$ —
NDTF equity securities	6,235	6,189	—	—	46
NDTF debt securities	2,717	874	1,843	—	—
Other equity securities	146	146	—	—	—
Other debt securities	285	37	248	—	—
Other cash and cash equivalents	127	127	—	—	—
Derivative assets	61	1	53	7	—
Total assets	9,748	7,551	2,144	7	46
Derivative liabilities	(324)	—	(240)	(84)	—
Net assets (liabilities)	$ 9,424	$ 7,551	$ 1,904	$ (77)	$ 46

	December 31, 2019				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized**
NDTF cash and cash equivalents	$ 101	$ 101	$ —	$ —	$ —
NDTF equity securities	5,684	5,633	—	—	51
NDTF debt securities	2,368	725	1,643	—	—
Other equity securities	122	122	—	—	—
Other debt securities	258	39	219	—	—
Other cash and cash equivalents	52	52	—	—	—
Derivative assets	25	3	7	15	—
Total assets	8,610	6,675	1,869	15	51
NDTF equity security contracts	(23)	—	(23)	—	—
Derivative liabilities	(277)	(15)	(145)	(117)	—
Net assets (liabilities)	$ 8,310	$ 6,660	$ 1,701	$ (102)	$ 51

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

	Derivatives (net)	
	Years Ended December 31,	
(in millions)	2020	2019
Balance at beginning of period	$ (102)	$ (113)
Total pretax realized or unrealized losses included in comprehensive income	(84)	—
Purchases, sales, issuances and settlements:		
Purchases	14	37
Settlements	(19)	(44)
Net transfers Out of Level 3[a]	117	—
Total (losses) gains included on the Consolidated Balance Sheet	(3)	18
Balance at end of period	$ (77)	$ (102)

(a) Transferred from Level 3 to Level 2 because observable market data became available.

DUKE ENERGY CAROLINAS

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020			
(in millions)	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF cash and cash equivalents	$ 30	$ 30	$ —	$ —
NDTF equity securities	3,685	3,639	—	46
NDTF debt securities	1,250	192	1,058	—
Derivative assets	20	—	20	—
Total assets	4,985	3,861	1,078	46
Derivative liabilities	(20)	—	(20)	—
Net assets	$ 4,965	$ 3,861	$1,058	$ 46

	December 31, 2019			
(in millions)	Total Fair Value	Level 1	Level 2	Not Categorized
NDTF cash and cash equivalents	$ 21	$ 21	$ —	$ —
NDTF equity securities	3,154	3,103	—	51
NDTF debt securities	1,172	206	966	—
Total assets	4,347	3,330	966	51
Derivative liabilities	(49)	—	(49)	—
Net assets	$ 4,298	$ 3,330	$ 917	$ 51

PROGRESS ENERGY

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020			December 31, 2019		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 147	$ 147	$ —	$ 80	$ 80	$ —
NDTF equity securities	2,550	2,550	—	2,530	2,530	—
NDTF debt securities	1,467	682	785	1,196	519	677
Other debt securities	26	—	26	51	—	51
Other cash and cash equivalents	106	106		49	49	—
Derivative assets	33	—	33	7	—	7
Total assets	4,329	3,485	844	3,913	3,178	735
NDTF equity security contracts	—	—	—	(23)	—	(23)
Derivative liabilities	(29)	—	(29)	(65)	—	(65)
Net assets	$ 4,300	$ 3,485	$ 815	$ 3,825	$ 3,178	$ 647

DUKE ENERGY PROGRESS

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020			December 31, 2019		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 76	$ 76	$ —	$ 53	$ 53	$ —
NDTF equity securities	2,459	2,459	—	2,077	2,077	—
NDTF debt securities	993	237	756	921	244	677
Other cash and cash equivalents	1	1	—	2	2	—
Derivative assets	33	—	33	—	—	—
Total assets	3,562	2,773	789	3,053	2,376	677
Derivative liabilities	(14)	—	(14)	(49)	—	(49)
Net assets	$ 3,548	$ 2,773	$ 775	$ 3,004	$ 2,376	$ 628

DUKE ENERGY FLORIDA

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020			December 31, 2019		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 2
NDTF cash and cash equivalents	$ 71	$ 71	$ —	$ 27	$ 27	$ —
NDTF equity securities	91	91	—	453	453	—
NDTF debt securities	474	445	29	275	275	—
Other debt securities	26	—	26	51	—	51
Other cash and cash equivalents	1	1	—	4	4	—
Derivative assets	—	—	—	7	—	7
Total assets	663	608	55	817	759	58
NDTF equity security contracts	—	—	—	(23)	—	(23)
Derivative liabilities	—	—	—	(1)	—	(1)
Net assets	$ 663	$ 608	$ 55	$ 793	$ 759	$ 34

DUKE ENERGY OHIO

The recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets were not material at December 31, 2020, and 2019.

DUKE ENERGY INDIANA

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020				December 31, 2019			
(in millions)	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3
Other equity securities	$ 97	$ 97	$ —	$ —	$ 81	$ 81	$ —	$ —
Other debt securities	45	—	45	—	44	—	44	—
Other cash equivalents	1	1	—	—	—	—	—	—
Derivative assets	6	—	—	6	13	2	—	11
Total assets	149	98	45	6	138	83	44	11
Derivative liabilities	(1)	(1)	—	—	(1)	(1)	—	—
Total assets	$ 148	$ 97	$ 45	$ 6	$ 137	$ 82	$ 44	$ 11

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

	Derivatives (net)	
	Years Ended December 31,	
(in millions)	2020	2019
Balance at beginning of period	$ 11	$ 22
Purchases, sales, issuances and settlements:		
Purchases	10	28
Settlements	(13)	(36)
Total losses included on the Consolidated Balance Sheet	(2)	(3)
Balance at end of period	$ 6	$ 11

PIEDMONT

The following table provides recorded balances for assets and liabilities measured at fair value on a recurring basis on the Consolidated Balance Sheets.

	December 31, 2020			December 31, 2019		
(in millions)	Total Fair Value	Level 1	Level 2	Total Fair Value	Level 1	Level 3
Derivative assets	$ 1	$ 1	$ —	$ 1	$ 1	$ —
Derivative liabilities	(122)	—	(122)	(117)	—	(117)
Net (liabilities) assets	$ (121)	$ 1	$ (122)	$ (116)	$ 1	$ (117)

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

	Derivatives (net)	
	Years Ended December 31,	
(in millions)	2020	2019
Balance at beginning of period	$(117)	$(141)
Net transfers Out of Level 3[(a)]	117	—
Total gains and settlements	—	24
Balance at end of period	$ —	$(117)

(a) Transferred from Level 3 to Level 2 because observable market data became available.

QUANTITATIVE INFORMATION ABOUT UNOBSERVABLE INPUTS

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

	December 31, 2020				
Investment Type	**Fair Value (in millions)**	**Valuation Technique**	**Unobservable Input**	**Range**	**Weighted Average Range**
Duke Energy					
Electricity contracts	$ (84)	Discounted cash flow	Forward electricity curves – price per MWh	$ 14.68 — $ 151.84	$ 28.84
Duke Energy Ohio					
FTRs	1	RTO auction pricing	FTR price – per MWh	0.25 — 1.68	0.79
Duke Energy Indiana					
FTRs	6	RTO auction pricing	FTR price – per MWh	(2.40) — 7.41	1.05
Duke Energy					
Total Level 3 derivatives	$ (77)				

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

OTHER FAIR VALUE DISCLOSURES

The fair value and book value of long-term debt, including current maturities, is summarized in the following table. Estimates determined are not necessarily indicative of amounts that could have been settled in current markets. Fair value of long-term debt uses Level 2 measurements.

	December 31, 2020		December 31, 2019	
(in millions)	**Book Value**	**Fair Value**	**Book Value**	**Fair Value**
Duke Energy[(a)]	**$ 59,863**	**$ 69,292**	$ 58,126	$ 63,062
Duke Energy Carolinas	**12,218**	**14,917**	11,900	13,516
Progress Energy	**19,264**	**23,470**	19,634	22,291
Duke Energy Progress	**9,258**	**10,862**	9,058	9,934
Duke Energy Florida	**7,915**	**9,756**	7,987	9,131
Duke Energy Ohio	**3,089**	**3,650**	2,619	2,964
Duke Energy Indiana	**4,091**	**5,204**	4,057	4,800
Piedmont	**2,780**	**3,306**	2,384	2,642

(a) Book value of long-term debt includes $1.3 billion as of December 31, 2020, and $1.5 billion as of December 31, 2019, of unamortized debt discount and premium, net in purchase accounting adjustments related to the mergers with Progress Energy and Piedmont that are excluded from fair value of long-term debt.

At both December 31, 2020, and December 31, 2019, fair value of cash and cash equivalents, accounts and notes receivable, accounts payable, notes payable and commercial paper, and nonrecourse notes payable of VIEs are not materially different from their carrying amounts because of the short-term nature of these instruments and/or because the stated rates approximate market rates.

17. VARIABLE INTEREST ENTITIES

A VIE is an entity that is evaluated for consolidation using more than a simple analysis of voting control. The analysis to determine whether an entity is a VIE considers contracts with an entity, credit support for an entity, the adequacy of the equity investment of an entity and the relationship of voting power to the amount of equity invested in an entity. This analysis is performed either upon the creation of a legal entity or upon the occurrence of an event requiring reevaluation, such as a significant change in an entity's assets or activities. A qualitative analysis of control determines the party that consolidates a VIE. This assessment is based on (i) what party has the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) what party has rights to receive benefits or is obligated to absorb losses that could potentially be significant to the VIE. The analysis of the party that consolidates a VIE is a continual reassessment.

CONSOLIDATED VIEs

The obligations of the consolidated VIEs discussed in the following paragraphs are nonrecourse to the Duke Energy Registrants. The registrants have no requirement to provide liquidity to, purchase assets of or guarantee performance of these VIEs unless noted in the following paragraphs.

No financial support was provided to any of the consolidated VIEs during the years ended December 31, 2020, 2019 and 2018, or is expected to be provided in the future, that was not previously contractually required.

Receivables Financing – DERF/DEPR/DEFR

DERF, DEPR and DEFR are bankruptcy remote, special purpose subsidiaries of Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida, respectively. DERF, DEPR and DEFR are wholly owned LLCs with separate legal existence from their parent companies, and their assets are not generally available to creditors of their parent companies. On a revolving basis, DERF, DEPR and DEFR buy certain accounts receivable arising from the sale of electricity and related services from their parent companies.

DERF, DEPR and DEFR borrow amounts under credit facilities to buy these receivables. Borrowing availability from the credit facilities is limited to the amount of qualified receivables purchased, which generally exclude receivables past due more than a predetermined number of days and reserves for expected past-due balances. The sole source of funds to satisfy the related debt obligations is cash collections from the receivables. Amounts borrowed under the credit facilities for DERF and DEPR are reflected on the Consolidated Balance Sheets as Long-Term Debt. Amounts borrowed under the credit facilities for DEFR are reflected on the Consolidated Balance Sheets as Current maturities of long-term debt.

Due to the COVID-19 pandemic, as described in Note 1, the Duke Energy Registrants suspended customer disconnections for nonpayment. Since taking action to suspend customer disconnections for nonpayment, certain jurisdictions have now returned to normal operations and billing practices. The full impact of COVID-19 and the Duke Energy Registrant's related response on customers' ability to pay for service is uncertain. However, the level of past-due receivables at Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida have increased significantly during the COVID-19 pandemic, and it is reasonably possible eventual write-offs of customer receivables may increase over current estimates. In 2020, DERF, DEPR and DEFR executed amendments to their credit facilities to manage the impact of past-due receivables resulting from the suspension of customer disconnections from COVID-19. See Note 3 for information about COVID-19 filings with state utility commissions.

The most significant activity that impacts the economic performance of DERF, DEPR and DEFR are the decisions made to manage delinquent receivables. Duke Energy Carolinas, Duke Energy Progress and Duke Energy Florida are considered the primary beneficiaries and consolidate DERF, DEPR and DEFR, respectively, as they make those decisions.

Receivables Financing – CRC

CRC is a bankruptcy remote, special purpose entity indirectly owned by Duke Energy. On a revolving basis, CRC buys certain accounts receivable arising from the sale of electricity, natural gas and related services from Duke Energy Ohio and Duke Energy Indiana. CRC borrows amounts under a credit facility to buy the receivables from Duke Energy Ohio and Duke Energy Indiana. Borrowing availability from the credit facility is limited to the amount of qualified receivables sold to CRC, which generally exclude receivables past due more than a predetermined number of days and reserves for expected past-due balances. The sole source of funds to satisfy the related debt obligation is cash collections from the receivables. Amounts borrowed under the credit facility are reflected on Duke Energy's Consolidated Balance Sheets as Long-Term Debt.

The proceeds Duke Energy Ohio and Duke Energy Indiana receive from the sale of receivables to CRC are approximately 75% cash and 25% in the form of a subordinated note from CRC. The subordinated note is a retained interest in the receivables sold. Depending on collection experience, additional equity infusions to CRC may be required by Duke Energy to maintain a minimum equity balance of $3 million.

Due to the COVID-19 pandemic, as described in Note 1, the Duke Energy Registrants suspended customer disconnections for nonpayment. Since taking action to suspend customer disconnections for nonpayment, certain jurisdictions have now returned to normal operations and billing practices. The full impact of COVID-19 and the Duke Energy Registrant's related response on customers' ability to pay for service is uncertain. However, the level of past-due receivables at Duke Energy Ohio and Duke Energy Indiana have increased significantly during the COVID-19 pandemic, and it is reasonably possible eventual write-offs of customer receivables may increase over current estimates. In July of 2020, CRC executed an amendment to its credit facility to manage the impact of past-due receivables resulting from the suspension of customer disconnections from COVID-19. See Note 3 for information about COVID-19 filings with state utility commissions.

CRC is considered a VIE because (i) equity capitalization is insufficient to support its operations, (ii) power to direct the activities that most significantly impact the economic performance of the entity is not held by the equity holder and (iii) deficiencies in net worth of CRC are funded by Duke Energy. The most significant activities that impact the economic performance of CRC are decisions made to manage delinquent receivables. Duke Energy is considered the primary beneficiary and consolidates CRC as it makes these decisions. Neither Duke Energy Ohio nor Duke Energy Indiana consolidate CRC.

Receivables Financing – Credit Facilities

The following table summarizes the amounts and expiration dates of the credit facilities and associated restricted receivables described above.

	Duke Energy			
		Duke Energy Carolinas	Duke Energy Progress	Duke Energy Florida
(in millions)	CRC	DERF	DEPR	DEFR
Expiration date	February 2023	December 2022	April 2023	April 2021
Credit facility amount	$ 350	$ 475	$ 350	$ 250
Amounts borrowed at December 31, 2020	**350**	**364**	**250**	**250**
Amounts borrowed at December 31, 2019	350	474	325	250
Restricted Receivables at December 31, 2020	**547**	**696**	**500**	**397**
Restricted Receivables at December 31, 2019	522	642	489	336

Nuclear Asset-Recovery Bonds – Duke Energy Florida Project Finance, LLC (DEFPF)

DEFPF is a bankruptcy remote, wholly owned special purpose subsidiary of Duke Energy Florida. DEFPF was formed in 2016 for the sole purpose of issuing nuclear asset-recovery bonds to finance Duke Energy Florida's unrecovered regulatory asset related to Crystal River Unit 3.

In 2016, DEFPF issued senior secured bonds and used the proceeds to acquire nuclear asset-recovery property from Duke Energy Florida. The nuclear asset-recovery property acquired includes the right to impose, bill, collect and adjust a non-bypassable nuclear asset-recovery charge from all Duke Energy Florida retail customers until the bonds are paid in full and all financing costs have been recovered. The nuclear asset-recovery bonds are secured by the nuclear asset-recovery property and cash collections from the nuclear asset-recovery charges are the sole source of funds to satisfy the debt obligation. The bondholders have no recourse to Duke Energy Florida.

DEFPF is considered a VIE primarily because the equity capitalization is insufficient to support its operations. Duke Energy Florida has the power to direct the significant activities of the VIE as described above and therefore Duke Energy Florida is considered the primary beneficiary and consolidates DEFPF.

The following table summarizes the impact of DEFPF on Duke Energy Florida's Consolidated Balance Sheets.

	December 31,	
(in millions)	2020	2019
Receivables of VIEs	**$ 4**	$ 5
Regulatory Assets: Current	**53**	52
Current Assets: Other	**39**	39
Other Noncurrent Assets: Regulatory assets	**937**	989
Current Liabilities: Other	**10**	10
Current maturities of long-term debt	**55**	54
Long-Term Debt	**1,002**	1,057

Commercial Renewables

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

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

	December 31,	
(in millions)	2020	2019
Current Assets: Other	$ 257	$ 203
Property, Plant and Equipment: Cost	6,394	5,747
Accumulated depreciation and amortization	(1,242)	(1,041)
Other Noncurrent Assets: Other	67	106
Current maturities of long-term debt	167	162
Long-Term Debt	1,569	1,541
Other Noncurrent Liabilities: AROs	148	127
Other Noncurrent Liabilities: Other	316	228

NON-CONSOLIDATED VIEs

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

	December 31, 2020				
	Duke Energy				
(in millions)	Pipeline Investments	Commercial Renewables	Total	Duke Energy Ohio	Duke Energy Indiana
Receivables from affiliated companies	$ —	$ —	$ —	$ 83	$ 110
Investments in equity method unconsolidated affiliates	—	530	530	—	—
Other noncurrent assets	31	—	31	—	—
Total assets	$ 31	$ 530	$ 561	$ 83	$ 110
Other current liabilities	928	5	933	—	—
Other noncurrent liabilities	8	10	18	—	—
Total liabilities	$ 936	$ 15	$ 951	$ —	$ —
Net assets (liabilities)	$ (905)	$ 515	$ (390)	$ 83	$ 110

	December 31, 2019				
	Duke Energy				
(in millions)	Pipeline Investments	Commercial Renewables	Total	Duke Energy Ohio	Duke Energy Indiana
Receivables from affiliated companies	$ —	$ (1)	$ (1)	$ 64	$ 77
Investments in equity method unconsolidated affiliates	1,179	300	1,479	—	—
Total assets	$ 1,179	$ 299	$ 1,478	$ 64	$ 77
Taxes accrued	(1)	—	(1)	—	—
Other current liabilities	—	4	4	—	—
Deferred income taxes	59	—	59	—	—
Other noncurrent liabilities	—	11	11	—	—
Total liabilities	$ 58	$ 15	$ 73	$ —	$ —
Net assets	$ 1,121	$ 284	$ 1,405	$ 64	$ 77

The Duke Energy Registrants are not aware of any situations where the maximum exposure to loss significantly exceeds the carrying values shown above except for the PPA with OVEC, which is discussed below, and future exit costs associated with the cancellation of the ACP pipeline, as discussed below.

Pipeline Investments

Duke Energy has investments in various joint ventures to construct and operate pipeline projects. These entities are considered VIEs due to having insufficient equity to finance their own activities without subordinated financial support. Duke Energy does not have the power to direct the activities that most significantly impact the economic performance, the obligation to absorb losses or the right to receive benefits of these VIEs and therefore does not consolidate these entities.

Duke Energy has a 47% ownership interest in ACP. In 2020, Duke Energy determined that it would no longer invest in the construction of the ACP pipeline. The current liability related to the cancellation of the ACP pipeline represents Duke Energy's continuing obligation to fund its share of ACP's obligations. See Notes 3, 7 and 12 for further information regarding this transaction.

Commercial Renewables

Duke Energy has investments in various renewable energy project entities. Some of these entities are VIEs due to Duke Energy issuing guarantees for debt service and operations and maintenance reserves in support of debt financings. Duke Energy does not consolidate these VIEs because power to direct and control key activities is shared jointly by Duke Energy and other owners.

OVEC

Duke Energy Ohio's 9% ownership interest in OVEC is considered a non-consolidated VIE due to OVEC having insufficient equity to finance its activities without subordinated financial support. The activities that most significantly impact OVEC's economic performance include fuel strategy and supply activities and decisions associated with ongoing operations and maintenance-related activities. Duke Energy Ohio does not have the unilateral power to direct these activities, and therefore, does not consolidate OVEC.

As a counterparty to an Inter-Company Power Agreement (ICPA), Duke Energy Ohio has a contractual arrangement to receive entitlements to capacity and energy from OVEC's power plants through June 2040 commensurate with its power participation ratio, which is equivalent to Duke Energy Ohio's ownership interest. Costs, including fuel, operating expenses, fixed costs, debt amortization and interest expense, are allocated to counterparties to the ICPA based on their power participation ratio. The value of the ICPA is subject to variability due to fluctuation in power prices and changes in OVEC's cost of business. On March 31, 2018, FES, a subsidiary of FirstEnergy Corp. and an ICPA counterparty with a power participation ratio of 4.85%, filed for Chapter 11 bankruptcy, which could increase costs allocated to the counterparties. On July 31, 2018, the bankruptcy court rejected the FES ICPA, which means OVEC is an unsecured creditor in the FES bankruptcy proceeding. Duke Energy Ohio cannot predict the impact of the bankruptcy filing on its OVEC interests. In addition, certain proposed environmental rulemaking could result in future increased OVEC cost allocations. In July 2020, legislation was proposed to repeal HB 6. Duke Energy cannot predict the outcome of this matter. See Note 3 for additional information.

CRC

See discussion under Consolidated VIEs for additional information related to CRC.

Amounts included in Receivables from affiliated companies in the above table for Duke Energy Ohio and Duke Energy Indiana reflect their retained interest in receivables sold to CRC. These subordinated notes held by Duke Energy Ohio and Duke Energy Indiana are stated at fair value. Carrying values of retained interests are determined by allocating carrying value of the receivables between assets sold and interests retained based on relative fair value. The allocated bases of the subordinated notes are not materially different than their face value because (i) the receivables generally turnover in less than two months, (ii) credit losses are reasonably predictable due to the broad customer base and lack of significant concentration and (iii) the equity in CRC is subordinate to all retained interests and thus would absorb losses first. The hypothetical effect on fair value of the retained interests assuming both a 10% and a 20% unfavorable variation in credit losses or discount rates is not material due to the short turnover of receivables and historically low credit loss history. Interest accrues to Duke Energy Ohio and Duke Energy Indiana on the retained interests using the acceptable yield method. This method generally approximates the stated rate on the notes since the allocated basis and the face value are nearly equivalent. An impairment charge is recorded against the carrying value of both retained interests and purchased beneficial interest whenever it is determined that an OTTI has occurred.

Key assumptions used in estimating fair value are detailed in the following table.

	Duke Energy Ohio		Duke Energy Indiana	
	2020	2019	**2020**	2019
Anticipated credit loss ratio	**0.5%**	0.6%	**0.3%**	0.3%
Discount rate	**1.6%**	3.3%	**1.6%**	3.3%
Receivable turnover rate	**13.4%**	13.4%	**11.3%**	11.5%

The following table shows the gross and net receivables sold.

	Duke Energy Ohio		Duke Energy Indiana	
	December 31,		December 31,	
(in millions)	**2020**	2019	**2020**	2019
Receivables sold	**$ 270**	$ 253	**$ 344**	$ 307
Less: Retained interests	**83**	64	**110**	77
Net receivables sold	**$ 187**	$ 189	**$ 234**	$ 230

The following table shows sales and cash flows related to receivables sold.

	Duke Energy Ohio			Duke Energy Indiana		
	Years Ended December 31,			Years Ended December 31,		
(in millions)	2020	2019	2018	2020	2019	2018
Sales						
Receivables sold	**$1,905**	$1,979	$1,987	**$2,631**	$ 2,837	$ 2,842
Loss recognized on sale	**10**	14	13	**12**	17	16
Cash flows						
Cash proceeds from receivables sold	**1,875**	1,993	1,967	**2,586**	2,860	2,815
Collection fees received	**1**	1	1	**1**	1	1
Return received on retained interests	**4**	6	6	**5**	9	9

Cash flows from sales of receivables are reflected within Cash Flows From Operating Activities and Cash Flows from Investing Activities on Duke Energy Ohio's and Duke Energy Indiana's Consolidated Statements of Cash Flows.

Collection fees received in connection with servicing transferred accounts receivable are included in Operation, maintenance and other on Duke Energy Ohio's and Duke Energy Indiana's Consolidated Statements of Operations and Comprehensive Income. The loss recognized on sales of receivables is calculated monthly by multiplying receivables sold during the month by the required discount. The required discount is derived monthly utilizing a three-year weighted average formula that considers charge-off history, late charge history and turnover history on the sold receivables, as well as a component for the time value of money. The discount rate, or component for the time value of money, is the prior month-end LIBOR plus a fixed rate of 1%.

18. REVENUE

Duke Energy recognizes revenue consistent with amounts billed under tariff offerings or at contractually agreed upon rates based on actual physical delivery of electric or natural gas service, including estimated volumes delivered when billings have not yet occurred. As such, the majority of Duke Energy's revenues have fixed pricing based on the contractual terms of the published tariffs, with variability in expected cash flows attributable to the customer's volumetric demand and ultimate quantities of energy or natural gas supplied and used during the billing period. The stand-alone selling price of related sales are designed to support recovery of prudently incurred costs and an appropriate return on invested assets and are primarily governed by published tariff rates or contractual agreements approved by relevant regulatory bodies. As described in Note 1, certain excise taxes and franchise fees levied by state or local governments are required to be paid even if not collected from the customer. These taxes are recognized on a gross basis as part of revenues. Duke Energy elects to account for all other taxes net of revenues.

Performance obligations are satisfied over time as energy or natural gas is delivered and consumed with billings generally occurring monthly and related payments due within 30 days, depending on regulatory requirements. In no event does the timing between payment and delivery of the goods and services exceed one year. Using this output method for revenue recognition provides a faithful depiction of the transfer of electric and natural gas service as customers obtain control of the commodity and benefit from its use at delivery. Additionally, Duke Energy has an enforceable right to consideration for energy or natural gas delivered at any discrete point in time and will recognize revenue at an amount that reflects the consideration to which Duke Energy is entitled for the energy or natural gas delivered.

As described above, the majority of Duke Energy's tariff revenues are at-will and, as such, related contracts with customers have an expected duration of one year or less and will not have future performance obligations for disclosure. Additionally, other long-term revenue streams, including wholesale contracts, generally provide services that are part of a single performance obligation, the delivery of electricity or natural gas. As such, other than material fixed consideration under long-term contracts, related disclosures for future performance obligations are also not applicable.

Duke Energy earns substantially all of its revenues through its reportable segments, Electric Utilities and Infrastructure, Gas Utilities and Infrastructure and Commercial Renewables.

Electric Utilities and Infrastructure

Electric Utilities and Infrastructure earns the majority of its revenues through retail and wholesale electric service through the generation, transmission, distribution and sale of electricity. Duke Energy generally provides retail and wholesale electric service customers with their full electric load requirements or with supplemental load requirements when the customer has other sources of electricity.

Retail electric service is generally marketed throughout Duke Energy's electric service territory through standard service offers. The standard service offers are through tariffs determined by regulators in Duke Energy's regulated service territory. Each tariff, which is assigned to customers based on customer class, has multiple components such as an energy charge, a demand charge, a basic facilities charge and applicable riders. Duke Energy considers each of these components to be aggregated into a single performance obligation for providing electric service, or in the case of distribution only customers in Duke Energy Ohio, for delivering electricity. Electricity is considered a single performance obligation satisfied over time consistent with the series guidance and is provided and consumed over the billing period, generally one month. Retail electric service is typically provided to at-will customers who can cancel service at any time, without a substantive penalty. Additionally, Duke Energy adheres to applicable regulatory requirements in each jurisdiction to ensure the collectability of amounts billed and appropriate mitigating procedures are followed when necessary. As such, revenue from contracts with customers for such contracts is equivalent to the electricity supplied and billed in that period (including unbilled estimates).

Wholesale electric service is generally provided under long-term contracts using cost-based pricing. FERC regulates costs that may be recovered from customers and the amount of return companies are permitted to earn. Wholesale contracts include both energy and demand charges. For full requirements contracts, Duke Energy considers both charges as a single performance obligation for providing integrated electric service. For contracts where energy and demand charges are considered separate performance obligations, energy and demand are each a distinct performance obligation under the series guidance and are satisfied as energy is delivered and stand-ready service is provided on a monthly basis. This service represents consumption over the billing period and revenue is recognized consistent with billings and unbilled estimates, which generally occur monthly. Contractual amounts owed are typically trued up annually based upon incurred costs in accordance with FERC published filings and the specific customer's actual peak demand. Estimates of variable consideration related to potential additional billings or refunds owed are updated quarterly.

The majority of wholesale revenues are full requirements contracts where the customers purchase the substantial majority of their energy needs and do not have a fixed quantity of contractually required energy or capacity. As such, related forecasted revenues are considered optional purchases. Supplemental requirements contracts that include contracted blocks of energy and capacity at contractually fixed prices have the following estimated remaining performance obligations:

	Remaining Performance Obligations						
(in millions)	2021	2022	2023	2024	2025	Thereafter	Total
Progress Energy	$ 93	$ 107	$ 44	$ 45	$ 7	$ 51	$ 347
Duke Energy Progress	8	8	8	8	—	—	32
Duke Energy Florida	85	99	36	37	7	51	315
Duke Energy Indiana	5	—	7	12	12	24	60

Revenues for block sales are recognized monthly as energy is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates.

Gas Utilities and Infrastructure

Gas Utilities and Infrastructure earns its revenue through retail and wholesale natural gas service through the transportation, distribution and sale of natural gas. Duke Energy generally provides retail and wholesale natural gas service customers with all natural gas load requirements. Additionally, while natural gas can be stored, substantially all natural gas provided by Duke Energy is consumed by customers simultaneously with receipt of delivery.

Retail natural gas service is marketed throughout Duke Energy's natural gas service territory using published tariff rates. The tariff rates are established by regulators in Duke Energy's service territories. Each tariff, which is assigned to customers based on customer class, have multiple components, such as a commodity charge, demand charge, customer or monthly charge and transportation costs. Duke Energy considers each of these components to be aggregated into a single performance obligation for providing natural gas service. For contracts where Duke Energy provides all of the customer's natural gas needs, the delivery of natural gas is considered a single performance obligation satisfied over time, and revenue is recognized monthly based on billings and unbilled estimates as service is provided and the commodity is consumed over the billing period. Additionally, natural gas service is typically at-will and customers can cancel service at any time, without a substantive penalty. Duke Energy also adheres to applicable regulatory requirements to ensure the collectability of amounts billed and receivable and appropriate mitigating procedures are followed when necessary.

Certain long-term individually negotiated contracts exist to provide natural gas service. These contracts are regulated and approved by state commissions. The negotiated contracts have multiple components, including a natural gas and a demand charge, similar to retail natural gas contracts. Duke Energy considers each of these components to be a single performance obligation for providing natural gas service. This service represents consumption over the billing period, generally one month.

Fixed capacity payments under long-term contracts for the Gas Utilities and Infrastructure segment include minimum margin contracts and supply arrangements with municipalities and power generation facilities. Revenues for related sales are recognized monthly as natural gas is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates. Estimated remaining performance obligations are as follows:

	Remaining Performance Obligations						
(in millions)	2021	2022	2023	2024	2025	Thereafter	Total
Piedmont	$ 65	$ 64	$ 61	$ 59	$ 58	$ 319	$ 626

Commercial Renewables

Commercial Renewables earns the majority of its revenues through long-term PPAs and generally sells all of its wind and solar facility output, electricity and RECs to customers. The majority of these PPAs have historically been accounted for as leases. For PPAs that are not accounted for as leases, the delivery of electricity and the delivery of RECs are considered separate performance obligations.

The delivery of electricity is a performance obligation satisfied over time and represents generation and consumption of the electricity over the billing period, generally one month. The delivery of RECs is a performance obligation satisfied at a point in time and represents delivery of each REC generated by the wind or solar facility. The majority of self-generated RECs are bundled with energy in Duke Energy's contracts and, as such, related revenues are recognized as energy is generated and delivered as that pattern is consistent with Duke Energy's performance. Commercial Renewables recognizes revenue based on the energy generated and billed for the period, generally one month, at contractual rates (including unbilled estimates) according to the invoice practical expedient. Amounts are typically due within 30 days of invoice.

Commercial Renewables also earns revenues from installation of distributed solar generation resources, which is primarily composed of EPC projects to deliver functioning solar power systems, generally completed within two to 12 months from commencement of construction. The installation of distributed solar generation resources is a performance obligation that is satisfied over time. Revenue from fixed-price EPC contracts is recognized using the input method as work is performed based on the estimated ratio of incurred costs to estimated total costs.

Other

The remainder of Duke Energy's operations is presented as Other, which does not include material revenues from contracts with customers.

Disaggregated Revenues

For the Electric and Gas Utility and Infrastructure segments, revenue by customer class is most meaningful to Duke Energy as each respective customer class collectively represents unique customer expectations of service, generally has different energy and demand requirements, and operates under tailored, regulatory approved pricing structures. Additionally, each customer class is impacted differently by weather and a variety of economic factors including the level of population growth, economic investment, employment levels, and regulatory activities in each of Duke Energy's jurisdictions. As such, analyzing revenues disaggregated by customer class allows Duke Energy to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. For the Commercial Renewables segment, the majority of revenues from contracts with customers are from selling all of the unit-contingent output at contractually defined pricing under long-term PPAs with consistent expectations regarding the timing and certainty of cash flows. Disaggregated revenues are presented as follows:

	Year Ended December 31, 2020							
(in millions) By market or type of customer	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Electric Utilities and Infrastructure								
Residential	$ 9,806	$ 2,997	$ 5,017	$ 2,059	$ 2,958	$ 726	$ 1,064	$ —
General	6,194	2,233	2,779	1,312	1,467	442	740	—
Industrial	2,859	1,137	901	649	252	137	683	—
Wholesale	1,864	380	1,228	1,034	194	32	224	—
Other revenues	914	281	596	294	302	82	72	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	$ 21,637	$ 7,028	$ 10,521	$ 5,348	$ 5,173	$ 1,419	$ 2,783	$ —
Gas Utilities and Infrastructure								
Residential	$ 930	$ —	$ —	$ —	$ —	$ 300	$ —	$ 630
Commercial	446	—	—	—	—	117	—	329
Industrial	127	—	—	—	—	17	—	110
Power Generation	—	—	—	—	—	—	—	34
Other revenues	87	—	—	—	—	17	—	70
Total Gas Utilities and Infrastructure revenue from contracts with customers	$ 1,590	$ —	$ —	$ —	$ —	$ 451	$ —	$ 1,173
Commercial Renewables								
Revenue from contracts with customers	$ 227	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Other								
Revenue from contracts with customers	$ 26	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total revenue from contracts with customers	$ 23,480	$ 7,028	$ 10,521	$ 5,348	$ 5,173	$ 1,870	$ 2,783	$ 1,173
Other revenue sources[(a)]	$ 388	$ (13)	$ 106	$ 74	$ 15	$ (12)	$ 12	$ 124
Total revenues	$ 23,868	$ 7,015	$ 10,627	$ 5,422	$ 5,188	$ 1,858	$ 2,795	$ 1,297

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

Combined Notes to Consolidated Financial Statements – (Continued)

	Year Ended December 31, 2019							
(in millions) **By market or type of customer**	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Electric Utilities and Infrastructure								
Residential	$ 9,863	$ 3,044	$ 4,998	$2,144	$ 2,854	$ 733	$1,087	$ —
General	6,431	2,244	2,935	1,368	1,567	451	802	—
Industrial	3,071	1,215	934	675	259	147	774	—
Wholesale	2,212	462	1,468	1,281	187	46	235	—
Other revenues	770	276	548	317	231	80	89	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	$ 22,347	$ 7,241	$ 10,883	$5,785	$ 5,098	$ 1,457	$2,987	$ —
Gas Utilities and Infrastructure								
Residential	$ 976	$ —	$ —	$ —	$ —	$ 315	$ —	$ 661
Commercial	508	—	—	—	—	130	—	378
Industrial	141	—	—	—	—	19	—	122
Power Generation	—	—	—	—	—	—	—	51
Other revenues	129	—	—	—	—	19	—	110
Total Gas Utilities and Infrastructure revenue from contracts with customers	$ 1,754	$ —	$ —	$ —	$ —	$ 483	$ —	$1,322
Commercial Renewables								
Revenue from contracts with customers	$ 223	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Other								
Revenue from contracts with customers	$ 24	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total revenue from contracts with customers	$ 24,348	$ 7,241	$ 10,883	$5,785	$ 5,098	$ 1,940	$2,987	$1,322
Other revenue sources[(a)]	$ 731	$ 154	$ 319	$ 172	$ 133	$ —	$ 17	$ 59
Total revenues	$ 25,079	$ 7,395	$ 11,202	$5,957	$ 5,231	$ 1,940	$3,004	$1,381

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

	Year Ended December 31, 2018							
(in millions) **By market or type of customer**	**Duke Energy**	**Duke Energy Carolinas**	**Progress Energy**	**Duke Energy Progress**	**Duke Energy Florida**	**Duke Energy Ohio**	**Duke Energy Indiana**	**Piedmont**
Electric Utilities and Infrastructure								
Residential	$ 9,587	$ 2,981	$ 4,785	$2,019	$ 2,766	$ 743	$1,076	$ —
General	6,127	2,119	2,809	1,280	1,529	422	778	—
Industrial	2,974	1,180	904	642	262	131	760	—
Wholesale	2,324	508	1,462	1,303	159	57	298	—
Other revenues	717	320	502	320	182	73	91	—
Total Electric Utilities and Infrastructure revenue from contracts with customers	$ 21,729	$ 7,108	$ 10,462	$5,564	$ 4,898	$ 1,426	$3,003	$ —
Gas Utilities and Infrastructure								
Residential	$ 1,000	$ —	$ —	$ —	$ —	$ 331	$ —	$ 669
Commercial	514	—	—	—	—	135	—	378
Industrial	147	—	—	—	—	18	—	128
Power Generation	—	—	—	—	—	—	—	54
Other revenues	139	—	—	—	—	19	—	120
Total Gas Utilities and Infrastructure revenue from contracts with customers	$ 1,800	$ —	$ —	$ —	$ —	$ 503	$ —	$1,349
Commercial Renewables								
Revenue from contracts with customers	$ 209	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Other								
Revenue from contracts with customers	$ 19	$ —	$ —	$ —	$ —	$ 1	$ —	$ —
Total revenue from contracts with customers	$ 23,757	$ 7,108	$ 10,462	$5,564	$ 4,898	$ 1,930	$3,003	$1,349
Other revenue sources[(a)]	$ 764	$ 192	$ 266	$ 135	$ 123	$ 27	$ 56	$ 26
Total revenues	$ 24,521	$ 7,300	$ 10,728	$5,699	$ 5,021	$ 1,957	$3,059	$1,375

(a) Other revenue sources include revenues from leases, derivatives and alternative revenue programs that are not considered revenues from contracts with customers. Alternative revenue programs in certain jurisdictions include regulatory mechanisms that periodically adjust for over or under collection of related revenues.

As described in Note 1, Duke Energy adopted the new guidance for credit losses effective January 1, 2020, using the modified retrospective method of adoption, which does not require restatement of prior year reported results. The following table presents the reserve for credit losses for trade and other receivables based on adoption of the new standard.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2019	$ 76	$ 10	$ 16	$ 8	$ 7	$ 4	$ 3	$ 6
Cumulative Change in Accounting Principle	5	1	2	1	1	—	—	1
Write-Offs	(58)	(13)	(23)	(8)	(14)	—	—	(6)
Credit Loss Expense	75	13	29	9	20	—	—	11
Other Adjustments	48	12	13	13	—	—	—	—
Balance at December 31, 2020	**$ 146**	**$ 23**	**$ 37**	**$ 23**	**$ 14**	**$ 4**	**$ 3**	**$ 12**

Trade and other receivables are evaluated based on an estimate of the risk of loss over the life of the receivable and current and historical conditions using supportable assumptions. Management evaluates the risk of loss for trade and other receivables by comparing the historical write-off amounts to total revenue over a specified period. Historical loss rates are adjusted due to the impact of current conditions, including the impacts of COVID-19, as well as forecasted conditions over a reasonable time period. The calculated write-off rate can be applied to the receivable balance for which an established reserve does not already exist. Management reviews the assumptions and risk of loss periodically for trade and other receivables. Due to the COVID-19 pandemic, as described in Note 1, certain jurisdictions have resumed standard billing and credit practices, disconnections for nonpayment and late payment charges, all of which were previously suspended in the first quarter of 2020. The specific actions taken by each Duke Energy Registrant are described in Note 3 and the impact of COVID-19 on certain receivables financing entities are described in Note 17. The impact of COVID-19 and Duke Energy's related response on customers' ability to pay for service is uncertain, and it is reasonably possible eventual write-offs of customer receivables may increase over current estimates.

The aging of trade receivables is presented in the table below. Duke Energy considers receivables greater than 30 days outstanding past due.

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unbilled Receivables	$ 969	$ 328	$ 283	$ 167	$ 116	$ 2	$ 16	$ 86
0-30 days	1,789	445	707	398	307	60	26	149
30-60 days	185	80	54	25	29	8	3	8
60-90 days	22	1	10	4	6	2	1	3
90+ days	119	16	32	9	23	30	12	9
Deferred Payment Arrangements[(a)]	215	96	80	52	28	—	—	7
Trade and Other Receivables	**$ 3,299**	**$ 966**	**$ 1,166**	**$ 655**	**$ 509**	**$ 102**	**$ 58**	**$ 262**

(a) Due to certain customer financial hardships created by the COVID-19 pandemic and resulting stay-at-home orders, Duke Energy permitted customers to defer payment of past-due amounts through an installment payment plan over a period of several months.

IMPACT OF WEATHER AND THE TIMING OF BILLING PERIODS

Revenues and costs are influenced by seasonal weather patterns. Peak sales of electricity occur during the summer and winter months, which results in higher revenue and cash flows during these periods. By contrast, lower sales of electricity occur during the spring and fall, allowing for scheduled plant maintenance. Residential and general service customers are more impacted by weather than industrial customers. Estimated weather impacts are based on actual current period weather compared to normal weather conditions. Normal weather conditions are defined as the long-term average of actual historical weather conditions. Heating degree days measure the variation in weather based on the extent the average daily temperature falls below a base temperature. Cooling degree days measure the variation in weather based on the extent the average daily temperature rises above the base temperature. Each degree of temperature below the base temperature counts as one heating degree day and each degree of temperature above the base temperature counts as one cooling degree day.

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

Gas Utilities and Infrastructure's costs and revenues are influenced by seasonal patterns due to peak natural gas sales occurring during the winter months as a result of space heating requirements. Residential customers are the most impacted by weather. There are certain regulatory mechanisms for the North Carolina, South Carolina, Tennessee, Ohio and Kentucky service territories that normalize the margins collected from certain customer classes during the winter. In North Carolina, rate design provides protection from both weather and other usage variations such as conservation, while South Carolina, Tennessee and Kentucky revenues are adjusted solely based on weather. Ohio primarily employs a fixed charge each month regardless of the season and usage.

UNBILLED REVENUE

Unbilled revenues are recognized by applying customer billing rates to the estimated volumes of energy or natural gas delivered but not yet billed. Unbilled revenues can vary significantly from period to period as a result of seasonality, weather, customer usage patterns, customer mix, average price in effect for customer classes, timing of rendering customer bills and meter reading schedules, and the impact of weather normalization or margin decoupling mechanisms.

Unbilled revenues are included within Receivables and Receivables of VIEs on the Consolidated Balance Sheets as shown in the following table.

	December 31,	
(in millions)	**2020**	**2019**
Duke Energy	**$ 969**	$ 843
Duke Energy Carolinas	**328**	298
Progress Energy	**283**	217
Duke Energy Progress	**167**	122
Duke Energy Florida	**116**	95
Duke Energy Ohio	**2**	1
Duke Energy Indiana	**16**	16
Piedmont	**86**	78

Additionally, Duke Energy Ohio and Duke Energy Indiana sell, on a revolving basis, nearly all of their retail accounts receivable, including receivables for unbilled revenues, to an affiliate, CRC and account for the transfers of receivables as sales. Accordingly, the receivables sold are not reflected on the Consolidated Balance Sheets of Duke Energy Ohio and Duke Energy Indiana See Note 17 for further information. These receivables for unbilled revenues are shown in the table below.

	December 31,	
(in millions)	**2020**	**2019**
Duke Energy Ohio	**$ 87**	$ 82
Duke Energy Indiana	**134**	115

19. STOCKHOLDERS' EQUITY

Basic EPS is computed by dividing net income available to Duke Energy common stockholders, as adjusted for distributed and undistributed earnings allocated to participating securities and accumulated preferred dividends, by the weighted average number of common shares outstanding during the period. Diluted EPS is computed by dividing net income available to Duke Energy common stockholders, as adjusted for distributed and undistributed earnings allocated to participating securities and accumulated preferred dividends, by the diluted weighted average number of common shares outstanding during the period. Diluted EPS reflects the potential dilution that could occur if securities or other agreements to issue common stock, such as equity forward sale agreements, were exercised or settled. Duke Energy's participating securities are RSUs that are entitled to dividends declared on Duke Energy common stock during the RSUs vesting periods. Dividends declared on preferred stock are recorded on the Consolidated Statements of Operations as a reduction of net income to arrive at net income available to Duke Energy common stockholders. Dividends accumulated on preferred stock are an adjustment to net income used in the calculation of basic and diluted EPS.

The following table presents Duke Energy's basic and diluted EPS calculations, the weighted average number of common shares outstanding and common and preferred share dividends declared.

	Years Ended December 31,		
(in millions, except per share amounts)	2020	2019	2018
Net Income available to Duke Energy common stockholders	**$ 1,270**	$3,707	$ 2,666
Less: Income (Loss) from discontinued operations	**7**	(7)	19
Accumulated preferred stock dividends adjustment	**1**	(15)	—
Less: Impact of participating securities	**2**	5	5
Income from continuing operations available to Duke Energy common stockholders	**$ 1,262**	$3,694	$ 2,642
Weighted average common shares outstanding – basic	**737**	729	708
Equity forwards	**1**	—	—
Weighted average common shares outstanding – diluted	**738**	729	708
EPS from continuing operations available to Duke Energy common stockholders			
Basic and Diluted	**$ 1.71**	$ 5.07	$ 3.73
Potentially dilutive items excluded from the calculation[(a)]	**2**	2	2
Dividends declared per common share	**$ 3.82**	$ 3.75	$ 3.64
Dividends declared on Series A preferred stock per depositary share	**$ 1.437**	$ 1.03	$ —
Dividends declared on Series B preferred stock per share	**$ 49.292**	$ —	$ —

(a) Performance stock awards were not included in the dilutive securities calculation because the performance measures related to the awards had not been met.

Common Stock

In November 2019, Duke Energy filed a prospectus supplement and executed an Equity Distribution Agreement (EDA) under which it may sell up to $1.5 billion of its common stock through a new ATM offering program, including an equity forward sales component. Under the terms of the EDA, Duke Energy may issue and sell shares of common stock through September 2022.

Separately, in November 2019, Duke Energy marketed an equity offering of 28.75 million shares of common stock through an Underwriting Agreement. In connection with the offering, Duke Energy entered into equity forward sales agreements with an initial forward price of $85.99 per share. In March 2020, Duke Energy marketed approximately 940,000 shares of common stock through an equity forward transaction under the ATM with an initial forward price of $89.76 per share. In May 2020, Duke Energy marketed approximately 903,000 shares of common stock through an equity forward transaction under the ATM with an initial forward price of $82.44 per share. In August 2020, Duke Energy marketed approximately 936,000 shares of common stock through an equity forward transaction under the ATM with an initial forward price of $79.52 per share.

In December 2020, Duke Energy physically settled the equity forwards by delivering 32 million shares of common stock in exchange for net cash proceeds of approximately $2.6 billion.

Preferred Stock

On March 29, 2019, Duke Energy completed the issuance of 40 million depositary shares, each representing 1/1,000th share of its Series A Cumulative Redeemable Perpetual Preferred Stock, at a price of $25 per depositary share. The transaction resulted in net proceeds of $973 million after issuance costs with proceeds used for general corporate purposes and to reduce short-term debt. The preferred stock has a $25 liquidation preference per depositary share and earns dividends on a cumulative basis at a rate of 5.75% per annum. Dividends are payable quarterly in arrears on the 16th day of March, June, September and December, and began on June 16, 2019.

The Series A Preferred Stock has no maturity or mandatory redemption date, is not redeemable at the option of the holders and includes separate call options. The first call option allows Duke Energy to call the Series A Preferred Stock at a redemption price of $25.50 per depositary share prior to June 15, 2024, in whole but not in part, at any time within 120 days after a ratings event where a rating agency amends, clarifies or changes the criteria it uses to assign equity credit for securities such as the preferred stock. The second call option allows Duke Energy to call the preferred stock, in whole or in part, at any time, on or after June 15, 2024, at a redemption price of $25 per depositary share. Duke Energy is also required to redeem all accumulated and unpaid dividends if either call option is exercised.

On September 12, 2019, Duke Energy completed the issuance of 1 million shares of its Series B Fixed-Rate Reset Cumulative Redeemable Perpetual Preferred Stock, at a price of $1,000 per share. The transaction resulted in net proceeds of $989 million after issuance costs with proceeds being used to pay down short-term debt, repay at maturity $500 million senior notes due September 2019, and for general corporate purposes. The preferred stock has a $1,000 liquidation preference per share and earns dividends on a cumulative basis at an initial rate of 4.875% per annum. Dividends are payable semiannually in arrears on the 16th day of March and September, and began on March 16, 2020. On September 16, 2024, the First Call Date, and any fifth anniversary of the First Call Date (each a Reset Date), the dividend rate will reset based on the then current five-year U.S. Treasury rate plus a spread of 3.388%.

The Series B Preferred Stock has no maturity or mandatory redemption date, is not redeemable at the option of the holders and includes separate call options. The first call option allows Duke Energy to call the Series B Preferred Stock at a redemption price of $1,020 per share, in whole but not in part, at any time within 120 days after a ratings event. The second call option allows Duke Energy to call the preferred stock, in whole or in part, on the First Call Date or any subsequent Reset Date at a redemption price in cash equal to $1,000 per share. Duke Energy is also required to redeem all accumulated and unpaid dividends if either call option is exercised.

Dividends issued on its Series A and Series B Preferred Stock are subject to approval by the Board of Directors. However, the deferral of dividend payments on the preferred stock prohibits the declaration of common stock dividends.

The Series A and Series B Preferred Stock rank, with respect to dividends and distributions upon liquidation or dissolution:

- senior to Common Stock and to each other class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is expressly made subordinated to the Series A and Series B Preferred Stock;
- on a parity with any class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is not expressly made senior or subordinated to the Series A or Series B Preferred Stock;
- junior to any class or series of capital stock established after the original issue date of the Series A and Series B Preferred Stock that is expressly made senior to the Series A or Series B Preferred Stock;
- junior to all existing and future indebtedness (including indebtedness outstanding under Duke Energy's credit facilities, unsecured senior notes, junior subordinated debentures and commercial paper) and other liabilities with respect to assets available to satisfy claims against Duke Energy; and
- structurally subordinated to existing and future indebtedness and other liabilities of Duke Energy's subsidiaries and future preferred stock of subsidiaries.

Holders of Series A and Series B Preferred Stock have no voting rights with respect to matters that generally require the approval of voting stockholders. The limited voting rights of holders of Series A and Series B Preferred Stock include the right to vote as a single class, respectively, on certain matters that may affect the preference or special rights of the preferred stock, except in the instance that Duke Energy elects to defer the payment of dividends for a total of six quarterly full dividend periods for Series A Preferred Stock or three semiannual full dividend periods for Series B Preferred Stock. If dividends are deferred for a cumulative total of six quarterly full dividend periods for Series A Preferred Stock or three semiannual full dividend periods for Series B Preferred Stock, whether or not for consecutive dividend periods, holders of the respective preferred stock have the right to elect two additional Board members to the Board of Directors.

20. SEVERANCE

During 2020, as a result of partial settlements between Duke Energy Carolinas, Duke Energy Progress and the Public Staff, Duke Energy Carolinas and Duke Energy Progress deferred as Regulatory assets on the Consolidated Balance Sheets, approximately $65 million and $33 million, respectively, of previously recorded severance charges within Operation, maintenance and other on the Consolidated Statements of Operations. These severance charges were previously recorded during 2018, as Duke Energy reviewed its operations and identified opportunities for improvement to better serve its customers. This operational review included the company's workforce strategy and staffing levels to ensure the company was staffed with the right skill sets and number of teammates to execute the long-term vision for Duke Energy. As such, Duke Energy extended voluntary and involuntary severance benefits to certain employees in specific areas as a part of workforce planning and digital transformation efforts. See Note 3 for more information.

The following table presents the direct and allocated severance and related charges accrued for approximately 30 employees in 2020, 140 employees in 2019, and 1,900 employees in 2018, by the Duke Energy Registrants within Operation, maintenance and other on the Consolidated Statements of Operations.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Year Ended December 31, 2020[(a)(b)]	**$ (85)**	**$ (58)**	**$ (28)**	**$ (31)**	**$ 3**	**$ —**	**$ —**	**$ —**
Year Ended December 31, 2019	16	8	6	3	3	—	1	1
Year Ended December 31, 2018	187	102	69	52	17	6	7	2

(a) Includes unamortized deferred severance charges of approximately $(86) million, $(57) million, $(29) million and $(29) million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.
(b) Includes adjustments associated with 2018 severance charges of approximately $(6) million, $(2) million, $(3) million and $(2) million for Duke Energy, Duke Energy Carolinas, Progress Energy and Duke Energy Progress, respectively.

The table below presents the severance liability for past and ongoing severance plans including the plans described above.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Balance at December 31, 2019	$ 41	$ 11	$ 13	$ 6	$ 7	$ 1	$ 2	$ —
Provision/Adjustments	1	—	—	(2)	2	(1)	—	—
Cash Reductions	(31)	(9)	(10)	(3)	(7)	—	(1)	—
Balance at December 31, 2020	**$ 11**	**$ 2**	**$ 3**	**$ 1**	**$ 2**	**$ —**	**$ 1**	**$ —**

21. STOCK-BASED COMPENSATION

The Duke Energy Corporation 2015 Long-Term Incentive Plan (the 2015 Plan) provides for the grant of stock-based compensation awards to employees and outside directors. The 2015 Plan reserves 10 million shares of common stock for issuance. Duke Energy has historically issued new shares upon exercising or vesting of share-based awards. However, Duke Energy may use a combination of new share issuances and open market repurchases for share-based awards that are exercised or vest in the future. Duke Energy has not determined with certainty the amount of such new share issuances or open market repurchases.

The following table summarizes the total expense recognized by the Duke Energy Registrants, net of tax, for stock-based compensation.

	Years Ended December 31,		
(in millions)	2020	2019	2018
Duke Energy	$ 61	$ 65	$ 56
Duke Energy Carolinas	22	24	20
Progress Energy	23	24	21
Duke Energy Progress	15	15	13
Duke Energy Florida	9	9	8
Duke Energy Ohio	4	5	4
Duke Energy Indiana	6	6	5
Piedmont	3	3	3

Duke Energy's pretax stock-based compensation costs, the tax benefit associated with stock-based compensation expense and stock-based compensation costs capitalized are included in the following table.

	Years Ended December 31,		
(in millions)	2020	2019	2018
RSU awards	$46	$ 44	$ 43
Performance awards	38	45	35
Pretax stock-based compensation cost	$84	$ 89	$ 78
Stock-based compensation costs capitalized	5	5	5
Stock-based compensation expense	$79	$ 84	$ 73
Tax benefit associated with stock-based compensation expense	$18	$ 19	$ 17

RESTRICTED STOCK UNIT AWARDS

RSU awards generally vest over periods from immediate to three years. Fair value amounts are based on the market price of Duke Energy's common stock on the grant date. The following table includes information related to RSU awards.

	Years Ended December 31,		
	2020	2019	2018
Shares granted (in thousands)	498	571	649
Fair value (in millions)	$ 50	$ 51	$ 49

The following table summarizes information about RSU awards outstanding.

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Outstanding at December 31, 2019	1,010	$ 83
Granted	498	100
Vested	(532)	82
Forfeited	(37)	92
Outstanding at December 31, 2020	939	93
RSU awards expected to vest	898	93

The total grant date fair value of shares vested during the years ended December 31, 2020, 2019 and 2018, was $43 million, $49 million and $43 million, respectively. At December 31, 2020, Duke Energy had $31 million of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 23 months.

PERFORMANCE AWARDS

Stock-based performance awards generally vest after three years if performance targets are met. The actual number of shares issued will range from zero to 200% of target shares, depending on the level of performance achieved.

Performance awards contain performance conditions and a market condition. The performance conditions are based on Duke Energy's cumulative adjusted EPS and total incident case rate (total incident case rate is one of our key employee safety metrics). The market condition is based on TSR of Duke Energy relative to a predefined peer group.

Relative TSR is valued using a path-dependent model that incorporates expected relative TSR into the fair value determination of Duke Energy's performance-based share awards. The model uses three-year historical volatilities and correlations for all companies in the predefined peer group, including Duke Energy, to simulate Duke Energy's relative TSR as of the end of the performance period. For each simulation, Duke Energy's relative TSR associated with the simulated stock price at the end of the performance period plus expected dividends within the period results in a value per share for the award portfolio. The average of these simulations is the expected portfolio value per share. Actual life to date results of Duke Energy's relative TSR for each grant are incorporated within the model. For performance awards granted in 2020, the model used a risk-free interest rate of 1.4%, which reflects the yield on three-year Treasury bonds as of the grant date, and an expected volatility of 13.6% based on Duke Energy's historical volatility over three years using daily stock prices.

The following table includes information related to stock-based performance awards.

	Years Ended December 31,		
	2020	2019	2018
Shares granted assuming target performance (in thousands)	319	320	372
Fair value (in millions)	$ 34	$ 27	$ 27

The following table summarizes information about stock-based performance awards outstanding and assumes payout at the target level.

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Outstanding at December 31, 2019	1,109	$ 80
Granted	319	105
Vested	(448)	81
Forfeited	(18)	88
Outstanding at December 31, 2020	962	87
Stock-based performance awards expected to vest	937	87

The total grant date fair value of shares vested during the years ended December 31, 2020, and 2019, was $36 million and $23 million, respectively. At December 31, 2020, Duke Energy had $23 million of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 21 months.

22. EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT RETIREMENT PLANS

Duke Energy and certain subsidiaries maintain, and the Subsidiary Registrants participate in, qualified, non-contributory defined benefit retirement plans. The Duke Energy plans cover most employees using a cash balance formula. Under a cash balance formula, a plan participant accumulates a retirement benefit consisting of pay credits based upon a percentage of current eligible earnings, age or age and years of service and interest credits. Certain employees are eligible for benefits that use a final average earnings formula. Under these final average earnings formulas, a plan participant accumulates a retirement benefit equal to the sum of percentages of their (i) highest three-year, four-year, or five-year average earnings, (ii) highest three-year, four-year, or five-year average earnings in excess of covered compensation per year of participation (maximum of 35 years) or (iii) highest three-year average earnings times years of participation in excess of 35 years. Duke Energy also maintains, and the Subsidiary Registrants participate in, non-qualified, non-contributory defined benefit retirement plans that cover certain executives. The qualified and non-qualified, non-contributory defined benefit plans are closed to new participants.

Duke Energy uses a December 31 measurement date for its defined benefit retirement plan assets and obligations. Actuarial gains experienced by the defined benefit retirement plans in remeasuring plan assets as of December 31, 2020, and 2019, were attributable to actual investment performance that exceeded expected investment performance. Actuarial losses experienced by the defined benefit retirement plans in remeasuring plan obligations as of December 31, 2020, and 2019, were primarily attributable to the decrease in the discount rate used to measure plan obligations.

As a result of the application of settlement accounting due to total lump-sum benefit payments exceeding the settlement threshold (defined as the sum of the service cost and interest cost on projected benefit obligation components of net periodic pension costs) for one of its qualified pension plans, Duke Energy recognized settlement charges of $94 million, primarily as a regulatory asset within Other Noncurrent Assets on the Consolidated Balance Sheets as of December 31, 2019 (an immaterial amount was recorded in Other income and expenses, net within the Consolidated Statement of Operations).

Settlement charges recognized by the Subsidiary Registrants as of December 31, 2019, which represent amounts allocated by Duke Energy for employees of the Subsidiary Registrants and allocated charges for their proportionate share of settlement charges for employees of Duke Energy's shared services affiliate, were $53 million for Duke Energy Carolinas, $26 million for Progress Energy, $20 million for Duke Energy Progress, $6 million for Duke Energy Florida, $4 million for Duke Energy Indiana, $2 million for Duke Energy Ohio and $8 million for Piedmont.

The settlement charges reflect the recognition of a pro-rata portion of previously unrecognized actuarial losses, equal to the percentage of reduction in the projected benefit obligation resulting from total lump-sum benefit payments as of December 31, 2019. Settlement charges recognized as a regulatory asset within Other Noncurrent Assets on the Consolidated Balance Sheets are amortized over the average remaining service period for participants in the plan. Amortization of settlement charges is disclosed in the tables below as a component of net periodic pension costs.

Net periodic benefit costs disclosed in the tables below represent the cost of the respective benefit plan for the periods presented prior to capitalization of amounts reflected as Net property, plant and equipment, on the Consolidated Balance Sheets. Only the service cost component of net periodic benefit costs is eligible to be capitalized. The remaining non-capitalized portions of net periodic benefit costs are classified as either: (1) service cost, which is recorded in Operations, maintenance and other on the Consolidated Statements of Operations; or as (2) components of non-service cost, which is recorded in Other income and expenses, net, on the Consolidated Statements of Operations. Amounts presented in the tables below for the Subsidiary Registrants represent the amounts of pension and other post-retirement benefit cost allocated by Duke Energy for employees of the Subsidiary Registrants. Additionally, the Consolidated Statements of Operations of the Subsidiary Registrants also include allocated net periodic benefit costs for their proportionate share of pension and post-retirement benefit cost for employees of Duke Energy's shared services affiliate that provide support to the Subsidiary Registrants. However, in the tables below, these amounts are only presented within the Duke Energy column (except for amortization of settlement charges). These allocated amounts are included in the governance and shared service costs discussed in Note 13.

Duke Energy's policy is to fund amounts on an actuarial basis to provide assets sufficient to meet benefit payments to be paid to plan participants. Duke Energy does not anticipate making any contributions in 2021. The following table includes information related to the Duke Energy Registrants' contributions to its qualified defined benefit pension plans.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Contributions Made:								
2020	$ —	$—	$ —	$—	$ —	$—	$—	$—
2019	77	7	57	4	53	2	2	1
2018	141	46	45	25	20	—	8	—

QUALIFIED PENSION PLANS

Components of Net Periodic Pension Costs

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 165	$ 51	$ 48	$ 27	$ 21	$ 5	$ 9	$ 6
Interest cost on projected benefit obligation	269	62	85	38	46	15	22	9
Expected return on plan assets	(572)	(145)	(190)	(87)	(101)	(28)	(42)	(21)
Amortization of actuarial loss	128	28	41	18	23	6	12	9
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(9)
Amortization of settlement charges	18	9	7	6	1	—	1	1
Net periodic pension costs[(a)(b)]	$ (24)	$ (3)	$ (12)	$ —	$ (11)	$ (2)	$ —	$ (5)

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 158	$ 49	$ 46	$ 26	$ 20	$ 4	$ 9	$ 5
Interest cost on projected benefit obligation	317	75	100	45	54	18	26	10
Expected return on plan assets	(567)	(147)	(178)	(88)	(89)	(28)	(43)	(22)
Amortization of actuarial loss	108	24	39	15	24	4	8	8
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(9)
Amortization of settlement charges	6	2	1	1	—	2	—	—
Net periodic pension costs[(a)(b)]	$ (10)	$ (5)	$ 5	$ (3)	$ 8	$ —	$ (2)	$ (8)

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 182	$ 58	$ 51	$ 29	$ 22	$ 5	$ 11	$ 7
Interest cost on projected benefit obligation	299	72	94	43	50	17	23	11
Expected return on plan assets	(559)	(147)	(178)	(85)	(91)	(28)	(42)	(22)
Amortization of actuarial loss	132	29	44	21	23	5	10	11
Amortization of prior service credit	(32)	(8)	(3)	(2)	(1)	—	(2)	(10)
Net periodic pension costs[(a)(b)]	$ 22	$ 4	$ 8	$ 6	$ 3	$ (1)	$ —	$ (3)

(a) Duke Energy amounts exclude $4 million, $4 million and $5 million for the years ended December 2020, 2019 and 2018, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

(b) Duke Energy Ohio amounts exclude $2 million, $2 million and $2 million for the years ended December 2020, 2019 and 2018, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

Amounts Recognized in Accumulated Other Comprehensive Income and Regulatory Assets

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net increase (decrease)	$ (62)	$ (39)	$ (26)	$ (30)	$ 4	$ (2)	$ 5	$ (1)
Accumulated other comprehensive loss (income)								
Deferred income tax expense (benefit)	$ 2	$ —	$ 1	$ —	$ 1	$ —	$ —	$ —
Amortization of prior year service credit	1	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	(11)	—	(1)	—	(3)	—	—	—
Net amount recognized in accumulated other comprehensive income	$ (8)	$ —	$ —	$ —	$ (2)	$ —	$ —	$ —

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net (decrease) increase	$ (212)	$ (156)	$ (79)	$ (59)	$ (20)	$ 12	$ 22	$ —
Accumulated other comprehensive (income) loss								
Deferred income tax expense (benefit)	$ 20	$ —	$ 1	$ —	$ (1)	$ —	$ —	$ —
Amortization of prior year service credit	1	—	—	—	—	—	—	—
Amortization of prior year actuarial losses	(15)	—	(2)	—	3	—	—	—
Net amount recognized in accumulated other comprehensive income	$ 6	$ —	$ (1)	$ —	$ 2	$ —	$ —	$ —

Reconciliation of Funded Status to Net Amount Recognized

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Obligation at prior measurement date	$ 8,321	$ 1,923	$ 2,608	$ 1,170	$ 1,424	$ 481	$ 693	$ 292
Service cost	157	49	46	26	20	4	8	5
Interest cost	269	62	85	38	46	15	22	9
Actuarial loss	433	83	144	50	93	21	46	14
Transfers	—	8	(8)	(8)	—	15	—	—
Benefits paid	(541)	(137)	(160)	(83)	(76)	(34)	(49)	(27)
Benefits paid – settlements	(5)	—	—	—	—	—	(5)	—
Obligation at measurement date	$ 8,634	$ 1,988	$ 2,715	$ 1,193	$ 1,507	$ 502	$ 715	$ 293
Accumulated Benefit Obligation at measurement date	$ 8,577	$ 1,989	$ 2,684	$ 1,194	$ 1,476	$ 493	$ 709	$ 294
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 8,910	$ 2,263	$ 2,898	$ 1,364	$ 1,515	$ 443	$ 667	$ 335
Actual return on plan assets	973	247	319	149	166	48	71	35
Benefits paid	(541)	(137)	(160)	(83)	(76)	(34)	(49)	(27)
Benefits paid – settlements	(5)	—	—	—	—	—	(5)	—
Transfers	—	8	(8)	(8)	—	15	—	—
Plan assets at measurement date	$ 9,337	$ 2,381	$ 3,049	$ 1,422	$ 1,605	$ 472	$ 684	$ 343
Funded status of plan	$ 703	$ 393	$ 334	$ 229	$ 98	$ (30)	$ (31)	$ 50

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Obligation at prior measurement date	$ 7,869	$ 1,954	$ 2,433	$ 1,125	$ 1,295	$ 435	$ 618	$ 264
Service cost	150	47	43	25	18	4	8	5
Interest cost	317	75	100	45	54	18	26	10
Actuarial loss	716	101	223	87	135	54	87	33
Transfers	—	11	—	—	—	—	—	—
Benefits paid	(731)	(265)	(191)	(112)	(78)	(30)	(46)	(20)
Obligation at measurement date	$ 8,321	$ 1,923	$ 2,608	$ 1,170	$ 1,424	$ 481	$ 693	$ 292
Accumulated Benefit Obligation at measurement date	$ 8,262	$ 1,923	$ 2,578	$ 1,170	$ 1,392	$ 471	$ 686	$ 292
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 8,233	$ 2,168	$ 2,606	$ 1,268	$ 1,322	$ 405	$ 611	$ 305
Employer contributions	77	7	57	4	53	2	2	1
Actual return on plan assets	1,331	342	426	204	218	66	100	49
Benefits paid	(731)	(265)	(191)	(112)	(78)	(30)	(46)	(20)
Transfers	—	11	—	—	—	—	—	—
Plan assets at measurement date	$ 8,910	$ 2,263	$ 2,898	$ 1,364	$ 1,515	$ 443	$ 667	$ 335
Funded status of plan	$ 589	$ 340	$ 290	$ 194	$ 91	$ (38)	$ (26)	$ 43

Amounts Recognized in the Consolidated Balance Sheets

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded pension[(a)]	$ 780	$ 393	$ 379	$ 229	$ 143	$ 58	$ 79	$ 50
Noncurrent pension liability[(b)]	$ 77	$ —	$ 45	$ —	$ 45	$ 88	$ 110	$ —
Net asset (liability) recognized	$ 703	$ 393	$ 334	$ 229	$ 98	$ (30)	$ (31)	$ 50
Regulatory assets	$ 1,910	$ 381	$ 691	$ 283	$ 408	$ 110	$ 209	$ 80
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	$ (21)	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Prior service credit	(2)	—	—	—	—	—	—	—
Net actuarial loss	100	—	2	—	—	—	—	—
Net amounts recognized in accumulated other comprehensive loss	$ 77	$ —	$ 2	$ —	$ —	$ —	$ —	$ —

	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded pension[(a)]	$ 621	$ 340	$ 322	$ 194	$ 123	$ 38	$ 57	$ 43
Noncurrent pension liability[(b)]	$ 32	$ —	$ 32	$ —	$ 32	$ 76	$ 83	$ —
Net asset recognized	$ 589	$ 340	$ 290	$ 194	$ 91	$ (38)	$ (26)	$ 43
Regulatory assets	$ 1,972	$ 420	$ 717	$ 313	$ 404	$ 112	$ 204	$ 81
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	$ (23)	$ —	$ (1)	$ —	$ (1)	$ —	$ —	$ —
Prior service credit	(3)	—	—	—	—	—	—	—
Net actuarial loss	111	—	3	—	3	—	—	—
Net amounts recognized in accumulated other comprehensive loss	$ 85	$ —	$ 2	$ —	$ 2	$ —	$ —	$ —
Amounts to be recognized in net periodic pension costs in the next year								
Unrecognized net actuarial loss	$ 135	$ 29	$ 43	$ 19	$ 24	$ 7	$ 10	$ 9
Unrecognized prior service credit	(32)	(8)	(3)	(2)	(1)	(1)	(2)	(9)

(a) Included in Other within Other Noncurrent Assets on the Consolidated Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Consolidated Balance Sheets.

Information for Plans with Accumulated Benefit Obligation in Excess of Plan Assets

	December 31, 2020				
(in millions)	Duke Energy	Progress Energy	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana
Projected benefit obligation	$ 4,914	$ 828	$ 828	$ 184	$ 293
Accumulated benefit obligation	4,856	796	796	176	285
Fair value of plan assets	4,837	783	783	96	183

	December 31, 2019	
(in millions)	Duke Energy Ohio	Duke Energy Indiana
Projected benefit obligation	$ 155	$ 260
Accumulated benefit obligation	146	252
Fair value of plan assets	79	177

Assumptions Used for Pension Benefits Accounting

The discount rate used to determine the current year pension obligation and following year's pension expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high-quality corporate bonds that generate sufficient cash flow to provide for projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

The average remaining service period for participants in active plans and life expectancy of participants in inactive plans is 13 years for Duke Energy, Duke Energy Indiana and Duke Energy Ohio, 14 years for Progress Energy, Duke Energy Progress and Duke Energy Florida, 12 years for Duke Energy Carolinas and nine years for Piedmont.

The following tables present the assumptions or range of assumptions used for pension benefit accounting.

	December 31,		
	2020	2019	2018
Benefit Obligations			
Discount rate	2.60%	3.30%	4.30%
Interest crediting rate	4.00%	4.00%	4.00%
Salary increase	3.50% – 4.00%	3.50% – 4.00%	3.50 % – 4.00%
Net Periodic Benefit Cost			
Discount rate	3.30%	4.30%	3.60%
Interest crediting rate	4.00%	4.00%	4.00%
Salary increase	3.50% – 4.00%	3.50% – 4.00%	3.50 % – 4.00%
Expected long-term rate of return on plan assets	6.85%	6.85%	6.50%

Expected Benefit Payments

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Years ending December 31,								
2021	$ 667	$ 169	$ 177	$ 94	$ 82	$ 40	$ 53	$ 29
2022	650	170	176	92	83	39	51	25
2023	655	174	181	95	85	38	49	22
2024	644	168	184	96	87	37	49	21
2025	617	163	181	93	88	35	47	19
2025-2029	2,745	677	846	399	443	154	217	83

NON-QUALIFIED PENSION PLANS

The accumulated benefit obligation, which equals the projected benefit obligation for non-qualified pension plans, was $320 million for Duke Energy, $13 million for Duke Energy Carolinas, $111 million for Progress Energy, $33 million for Duke Energy Progress, $45 million for Duke Energy Florida, $4 million for Duke Energy Ohio, $2 million for Duke Energy Indiana and $4 million for Piedmont as of December 31, 2020.

Employer contributions, which equal benefits paid for non-qualified pension plans, were $23 million for Duke Energy, $2 million for Duke Energy Carolinas, $8 million for Progress Energy, $3 million for Duke Energy Progress and $3 million for Duke Energy Florida for the year ended December 31, 2020. Employer contributions were not material for Duke Energy Ohio, Duke Energy Indiana or Piedmont for the year ended December 31, 2020.

Net periodic pension costs for non-qualified pension plans were not material for the years ended December 31, 2020, 2019 or 2018.

OTHER POST-RETIREMENT BENEFIT PLANS

Duke Energy provides, and the Subsidiary Registrants participate in, some health care and life insurance benefits for retired employees on a contributory and non-contributory basis. Employees are eligible for these benefits if they have met age and service requirements at retirement, as defined in the plans. The health care benefits include medical, dental and prescription drug coverage and are subject to certain limitations, such as deductibles and copayments.

Duke Energy did not make any pre-funding contributions to its other post-retirement benefit plans during the years ended December 31, 2020, 2019 or 2018.

Components of Net Periodic Other Post-Retirement Benefit Costs

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 4	$ 1	$ 1	$ —	$ —	$ —	$ 1	$ —
Interest cost on accumulated post-retirement benefit obligation	23	5	10	5	4	1	2	1
Expected return on plan assets	(13)	(8)	—	—	—	—	—	(2)
Amortization of actuarial loss	2	—	1	—	1	—	4	—
Amortization of prior service credit	(14)	(4)	(3)	(1)	(2)	(1)	(1)	(2)
Net periodic post-retirement benefit costs (a)(b)	$ 2	$ (6)	$ 9	$ 4	$ 3	$ —	$ 6	$ (3)

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 4	$ 1	$ 1	$ —	$ 1	$ —	$ 1	$ —
Interest cost on accumulated post-retirement benefit obligation	30	7	12	7	5	1	3	1
Expected return on plan assets	(12)	(7)	—	—	—	—	—	(1)
Amortization of actuarial loss	4	2	1	—	1	—	4	—
Amortization of prior service credit	(19)	(5)	(8)	(1)	(7)	(1)	(1)	(2)
Net periodic post-retirement benefit costs(a)(b)	$ 7	$ (2)	$ 6	$ 6	$ —	$ —	$ 7	$ (2)

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Service cost	$ 6	$ 1	$ 1	$ —	$ 1	$ 1	$ 1	$ 1
Interest cost on accumulated post-retirement benefit obligation	28	7	12	6	6	1	3	1
Expected return on plan assets	(13)	(8)	—	—	—	—	—	(2)
Amortization of actuarial loss	6	3	1	1	—	—	4	—
Amortization of prior service credit	(19)	(5)	(8)	(1)	(7)	(1)	(1)	(2)
Net periodic post-retirement benefit costs(a)(b)	$ 8	$ (2)	$ 6	$ 6	$ —	$ 1	$ 7	$ (2)

(a) Duke Energy amounts exclude $6 million, $6 million and $7 million for the years ended December 2020, 2019 and 2018, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

(b) Duke Energy Ohio amounts exclude $1 million, $2 million and $2 million for the years ended December 2020, 2019 and 2018, respectively, of regulatory asset amortization resulting from purchase accounting adjustments associated with Duke Energy's merger with Cinergy in April 2006.

Amounts Recognized in Accumulated Other Comprehensive Income and Regulatory Assets and Liabilities

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net increase (decrease)	$ 9	$ —	$ 9	$ 6	$ 3	$ —	$ (4)	$ —
Regulatory liabilities, net increase (decrease)	$ (10)	$ (7)	$ —	$ —	$ —	$ —	$ (1)	$ —
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Amortization of prior year service credit	1	—	—	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Regulatory assets, net increase (decrease)	$ (127)	$ —	$ (127)	$ (82)	$ (45)	$ —	$ (5)	$ —
Regulatory liabilities, net increase (decrease)	$ (152)	$ 1	$ (149)	$ (93)	$ (56)	$ (1)	$ (4)	$ 3
Accumulated other comprehensive (income) loss								
Deferred income tax benefit	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Amortization of prior year actuarial gain	(4)	—	—	—	—	—	—	—
Net amount recognized in accumulated other comprehensive income	$ (4)	$ —	$ —	$ —	$ —	$ —	$ —	$ —

Reconciliation of Funded Status to Accrued Other Post-Retirement Benefit Costs

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Accumulated post-retirement benefit obligation at prior measurement date	$ 723	$ 175	$ 303	$ 168	$ 135	$ 29	$ 64	$ 30
Service cost	4	1	1	—	—	—	1	—
Interest cost	23	5	10	5	4	1	2	1
Plan participants' contributions	15	3	5	3	2	1	2	—
Actuarial losses	19	8	8	5	2	—	1	1
Benefits paid	(75)	(18)	(28)	(15)	(13)	(4)	(9)	(2)
Accumulated post-retirement benefit obligation at measurement date	$ 709	$ 174	$ 299	$ 166	$ 130	$ 27	$ 61	$ 30
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 220	$ 130	$ (1)	$ (1)	$ —	$ 9	$ 5	$ 34
Actual return on plan assets	24	14	—	—	—	—	1	4
Benefits paid	(75)	(18)	(28)	(15)	(13)	(4)	(9)	(2)
Employer contributions	53	10	23	11	10	3	8	1
Plan participants' contributions	15	3	5	3	2	1	2	—
Plan assets at measurement date	$ 237	$ 139	$ (1)	$ (2)	$ (1)	$ 9	$ 7	$ 37
Funded status of plan	$ (472)	$ (35)	$ (300)	$ (168)	$ (131)	$ (18)	$ (54)	$ 7

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Change in Projected Benefit Obligation								
Accumulated post-retirement benefit obligation at prior measurement date	$ 728	$ 174	$ 303	$ 166	$ 137	$ 29	$ 67	$ 30
Service cost	4	1	1	—	1	—	1	—
Interest cost	30	7	12	7	5	1	3	1
Plan participants' contributions	16	3	6	3	2	1	2	—
Actuarial losses	28	9	13	9	5	1	2	—
Benefits paid	(83)	(19)	(32)	(17)	(15)	(3)	(11)	(1)
Accumulated post-retirement benefit obligation at measurement date	$ 723	$ 175	$ 303	$ 168	$ 135	$ 29	$ 64	$ 30
Change in Fair Value of Plan Assets								
Plan assets at prior measurement date	$ 195	$ 115	$ —	$ —	$ —	$ 8	$ 5	$ 29
Actual return on plan assets	32	20	(1)	—	—	1	—	6
Benefits paid	(83)	(19)	(32)	(17)	(15)	(3)	(11)	(1)
Employer contributions	60	11	26	13	13	2	9	—
Plan participants' contributions	16	3	6	3	2	1	2	—
Plan assets at measurement date	$ 220	$ 130	$ (1)	$ (1)	$ —	$ 9	$ 5	$ 34
Funded status of plan	$ (503)	$ (45)	$ (304)	$ (169)	$ (135)	$ (20)	$ (59)	$ 4

Amounts Recognized in the Consolidated Balance Sheets

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Prefunded post-retirement benefit	$ 8	$ —	$ —	$ —	$ —	$ 1	$ —	$ 7
Current post-retirement liability[(a)]	9	—	6	4	2	2	—	—
Noncurrent post-retirement liability[(b)]	471	35	294	164	129	17	54	—
Net liability (asset) recognized	$ 472	$ 35	$ 300	$ 168	$ 131	$ 18	$ 54	$ (7)
Regulatory assets	$ 144	$ —	$ 144	$ 88	$ 56	$ —	$ 32	$ —
Regulatory liabilities	$ 139	$ 32	$ —	$ —	$ —	$ 17	$ 62	$ 3
Accumulated other comprehensive (income) loss								
Deferred income tax expense	$ 3	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Prior service credit	(1)	—	—	—	—	—	—	—
Net actuarial gain	(13)	—	—	—	—	—	—	—
Net amounts recognized in accumulated other comprehensive income	$ (11)	$ —	$ —	$ —	$ —	$ —	$ —	$ —

	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current post-retirement liability[(a)]	$ 9	$ —	$ 5	$ 3	$ 2	$ 1	$ —	$ —
Noncurrent post-retirement liability[(b)]	494	45	299	163	133	19	59	(4)
Total accrued post-retirement liability	$ 503	$ 45	$ 304	$ 166	$ 135	$ 20	$ 59	$ (4)
Regulatory assets	$ 135	$ —	$ 135	$ 82	$ 53	$ —	$ 36	$ —
Regulatory liabilities	$ 149	$ 39	$ —	$ —	$ —	$ 17	$ 63	$ 3
Accumulated other comprehensive (income) loss								
Deferred income tax expense	$ 3	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Prior service credit	(2)	—	—	—	—	—	—	—
Net actuarial gain	(13)	—	—	—	—	—	—	—
Net amounts recognized in accumulated other comprehensive income	$ (12)	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Amounts to be recognized in net periodic pension expense in the next year								
Unrecognized net actuarial loss	$ 5	$ 3	$ 1	$ —	$ 1	$ —	$ —	$ —
Unrecognized prior service credit	(14)	(4)	(3)	(1)	(2)	(1)	(1)	(2)

(a) Included in Other within Current Liabilities on the Consolidated Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Consolidated Balance Sheets.

Assumptions Used for Other Post-Retirement Benefits Accounting

The discount rate used to determine the current year other post-retirement benefits obligation and following year's other post-retirement benefits expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high-quality corporate bonds that generate sufficient cash flow to provide for projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

The average remaining service period of active covered employees is eight years for Duke Energy, seven years for Progress Energy, Duke Energy Florida and Duke Energy Ohio and six years for Duke Energy Carolinas, Duke Energy Progress, Duke Energy Indiana and Piedmont.

The following tables present the assumptions used for other post-retirement benefits accounting.

	December 31,		
	2020	2019	2018
Benefit Obligations			
Discount rate	**2.60 %**	3.30%	4.30%
Net Periodic Benefit Cost			
Discount rate	**3.30 %**	4.30%	3.60%
Expected long-term rate of return on plan assets	**6.85 %**	6.85%	6.50%
Assumed tax rate	**23 %**	23%	35%

Assumed Health Care Cost Trend Rate

	December 31,	
	2020	2019
Health care cost trend rate assumed for next year	**6.25%**	6.00%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	**4.75%**	4.75%
Year that rate reaches ultimate trend	**2028**	2026

Expected Benefit Payments

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Years ending December 31,								
2021	$ 73	$ 17	$ 28	$ 15	$ 12	$ 3	$ 8	$ 2
2022	66	16	26	14	12	3	7	2
2023	62	15	25	14	11	3	6	2
2024	58	14	24	13	11	2	6	2
2025	54	13	22	12	10	2	5	2
2026-2030	223	54	94	52	41	9	21	11

PLAN ASSETS

Description and Allocations

Duke Energy Master Retirement Trust

Assets for both the qualified pension and other post-retirement benefits are maintained in the Duke Energy Master Retirement Trust. Approximately 98% of the Duke Energy Master Retirement Trust assets were allocated to qualified pension plans and approximately 2% were allocated to other post-retirement plans (comprised of 401(h) accounts), as of December 31, 2020, and 2019. The investment objective of the Duke Energy Master Retirement Trust is to invest in a diverse portfolio of assets that is expected to generate positive surplus return over time (i.e., asset growth greater than liability growth) subject to a prudent level of portfolio risk, for the purpose of enhancing the security of benefits for plan participants.

As of December 31, 2020, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.5%. The expected long-term rate of return was developed using a weighted average calculation of expected returns based primarily on future expected returns across asset classes considering the use of active asset managers, where applicable. The asset allocation targets were set after considering the investment objective and the risk profile. Equity securities are held for their higher expected returns. Debt securities are primarily held to hedge the qualified pension plan. Return seeking debt securities, hedge funds and other global securities are held for diversification. Investments within asset classes are diversified to achieve broad market participation and reduce the impact of individual managers or investments.

Effective January 1, 2020, the target asset allocation for the Duke Energy Retirement Master Trust is 58% liability hedging assets and 42% return-seeking assets. Duke Energy periodically reviews its asset allocation targets, and over time, as the funded status of the benefit plans increase, the level of asset risk relative to plan liabilities may be reduced to better manage Duke Energy's benefit plan liabilities and reduce funded status volatility.

The Duke Energy Master Retirement Trust is authorized to engage in the lending of certain plan assets. Securities lending is an investment management enhancement that utilizes certain existing securities of the Duke Energy Master Retirement Trust to earn additional income. Securities lending involves the loaning of securities to approved parties. In return for the loaned securities, the Duke Energy Master Retirement Trust receives collateral in the form of cash and securities as a safeguard against possible default of any borrower on the return of the loan under terms that permit the Duke Energy Master Retirement Trust to sell the securities. The Duke Energy Master Retirement Trust mitigates credit risk associated with securities lending arrangements by monitoring the fair value of the securities loaned, with additional collateral obtained or refunded as necessary. The fair value of securities on loan was approximately $482 million and $351 million at December 31, 2020, and 2019, respectively. Cash and securities obtained as collateral exceeded the fair value of the securities loaned at December 31, 2020, and 2019, respectively. Securities lending income earned by the Duke Energy Master Retirement Trust was immaterial for the years ended December 31, 2020, 2019 and 2018, respectively.

Qualified pension and other post-retirement benefits for the Subsidiary Registrants are derived from the Duke Energy Master Retirement Trust, as such, each are allocated their proportionate share of the assets discussed below.

The following table includes the target asset allocations by asset class at December 31, 2020, and the actual asset allocations for the Duke Energy Master Retirement Trust.

	Target Allocation	Actual Allocation at December 31,	
		2020	**2019**
Global equity securities	28%	**30%**	27%
Global private equity securities	1%	**1%**	1%
Debt securities	58%	**55%**	57%
Return seeking debt securities	4%	**5%**	5%
Hedge funds	3%	**3%**	3%
Real estate and cash	6%	**6%**	7%
Total	100%	**100%**	100%

Other post-retirement assets

Duke Energy's other post-retirement assets are comprised of Voluntary Employees' Beneficiary Association (VEBA) trusts and 401(h) accounts held within the Duke Energy Master Retirement Trust. Duke Energy's investment objective is to achieve sufficient returns, subject to a prudent level of portfolio risk, for the purpose of promoting the security of plan benefits for participants.

The following table presents target and actual asset allocations for the VEBA trusts at December 31, 2020.

	Target Allocation	Actual Allocation at December 31,	
		2020	**2019**
U.S. equity securities	30%	**36%**	35%
Non-U.S. equity securities	6%	**6%**	9%
Real estate	2%	**2%**	2%
Debt securities	45%	**42%**	37%
Cash	17%	**14%**	17%
Total	100%	**100%**	100%

Fair Value Measurements

Duke Energy classifies recurring and non-recurring fair value measurements based on the fair value hierarchy as discussed in Note 16.

Valuation methods of the primary fair value measurements disclosed below are as follows:

Investments in equity securities

Investments in equity securities are typically valued at the closing price in the principal active market as of the last business day of the reporting period. Principal active markets for equity prices include published exchanges such as NASDAQ and NYSE. Foreign equity prices are translated from their trading currency using the currency exchange rate in effect at the close of the principal active market. Prices have not been adjusted to reflect after-hours market activity. The majority of investments in equity securities are valued using Level 1 measurements. When the price of an institutional commingled fund is unpublished, it is not categorized in the fair value hierarchy, even though the funds are readily available at the fair value.

Investments in corporate debt securities and U.S. government securities

Most debt investments are valued based on a calculation using interest rate curves and credit spreads applied to the terms of the debt instrument (maturity and coupon interest rate) and consider the counterparty credit rating. Most debt valuations are Level 2 measurements. If the market for a particular fixed-income security is relatively inactive or illiquid, the measurement is Level 3. U.S. Treasury debt is typically Level 2.

Investments in short-term investment funds

Investments in short-term investment funds are valued at the net asset value of units held at year end and are readily redeemable at the measurement date. Investments in short-term investment funds with published prices are valued as Level 1. Investments in short-term investment funds with unpublished prices are valued as Level 2.

Duke Energy Master Retirement Trust

The following tables provide the fair value measurement amounts for the Duke Energy Master Retirement Trust qualified pension and other post-retirement assets.

	December 31, 2020				
(in millions)	**Total Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Not Categorized**[(b)]
Equity securities	$3,202	$3,162	$ —	$ —	$ 40
Corporate debt securities	4,162	—	4,162	—	—
Short-term investment funds	397	247	150	—	—
Partnership interests	97	—	—	—	97
Hedge funds	198	—	—	—	198
U.S. government securities	1,164	—	1,164	—	—
Governments bonds – foreign	73	—	73	—	—
Cash	98	98	—	—	—
Net pending transactions and other investments	88	34	54	—	—
Total assets[(a)]	$9,479	$3,541	$5,603	$ —	$ 335

(a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont were allocated approximately 26%, 32%, 15%, 17%, 5%, 7% and 4%, respectively, of the Duke Energy Master Retirement Trust at December 31, 2020. Accordingly, all amounts included in the table above are allocable to the Subsidiary Registrants using these percentages.

(b) Certain investments that are measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy.

	December 31, 2019				
(in millions)	Total Fair Value	Level 1	Level 2	Level 3	Not Categorized[b]
Equity securities	$2,730	$2,712	$ —	$ —	$ 18
Corporate debt securities	3,999	—	3,999	—	—
Short-term investment funds	545	455	90	—	—
Partnership interests	104	—	—	—	104
Hedge funds	206	—	—	—	206
U.S. government securities	1,231	—	1,231	—	—
Guaranteed investment contracts	11	—	—	11	—
Governments bonds – foreign	78	—	78	—	—
Cash	75	75	—	—	—
Net pending transactions and other investments	46	(43)	89	—	—
Total assets[a]	$9,025	$3,199	$ 5,487	$ 11	$ 328

(a) Duke Energy Carolinas, Progress Energy, Duke Energy Progress, Duke Energy Florida, Duke Energy Ohio, Duke Energy Indiana and Piedmont were allocated approximately 26%, 31%, 15%, 17%, 5%, 7% and 4%, respectively, of the Duke Energy Master Retirement Trust at December 31, 2019. Accordingly, all amounts included in the table above are allocable to the Subsidiary Registrants using these percentages.
(b) Certain investments that are measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy.

The following table provides a reconciliation of beginning and ending balances of Duke Energy Master Retirement Trust qualified pension and other post-retirement assets at fair value on a recurring basis where the determination of fair value includes significant unobservable inputs (Level 3).

(in millions)	2020	2019
Balance at January 1	**$ 11**	$ 27
Sales	**(12)**	(18)
Total gains and other, net	**1**	2
Transfer of Level 3 assets to other classifications	**—**	—
Balance at December 31	**$ —**	$ 11

Other post-retirement assets

The following tables provide the fair value measurement amounts for VEBA trust assets.

	December 31, 2020	
(in millions)	Total Fair Value	Level 2
Cash and cash equivalents	**$ 5**	**$ 5**
Real estate	**1**	**1**
Equity securities	**23**	**23**
Debt securities	**19**	**19**
Total assets	**$48**	**$ 48**

	December 31, 2019	
(in millions)	Total Fair Value	Level 2
Cash and cash equivalents	$ 9	$ 9
Real estate	1	1
Equity securities	22	22
Debt securities	18	18
Total assets	$50	$50

EMPLOYEE SAVINGS PLANS

Retirement Savings Plan

Duke Energy or its affiliates sponsor, and the Subsidiary Registrants participate in, employee savings plans that cover substantially all U.S. employees. Most employees participate in a matching contribution formula where Duke Energy provides a matching contribution generally equal to 100% of employee before-tax and Roth 401(k) contributions of up to 6% of eligible pay per pay period. Dividends on Duke Energy shares held by the savings plans are charged to retained earnings when declared and shares held in the plans are considered outstanding in the calculation of basic and diluted EPS.

For new and rehired employees who are not eligible to participate in Duke Energy's defined benefit plans, an additional employer contribution of 4% of eligible pay per pay period, which is subject to a three-year vesting schedule, is provided to the employee's savings plan account. Certain Piedmont employees whose participation in a prior Piedmont defined benefit plan (that was frozen as of December 31, 2017) are eligible for employer transition credit contributions of 3% to 5% of eligible pay per period, for each pay period during the three-year period ending December 31, 2020.

The following table includes pretax employer matching contributions made by Duke Energy and expensed by the Subsidiary Registrants.

(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Years ended December 31,								
2020	**$213**	**$67**	**$57**	**$38**	**$19**	**$5**	**$11**	**$13**
2019	214	66	58	38	20	5	11	13
2018	213	68	58	40	19	4	10	12

23. INCOME TAXES

Consolidated Appropriations Act

On December 27, 2020, President Trump signed the Consolidated Appropriations Act (CAA) into law. In addition to the CAA providing funding for government operations, it also provided tax provisions to assist with COVID-19 relief, including extending certain expiring tax provisions. The Company has reviewed the provisions of the CAA and has determined that there is no material impact on the 2020 financial statements as a result of the CAA being signed into law.

CARES Act

On March 27, 2020, the CARES Act was enacted. The CARES Act is an emergency economic stimulus package in response to the COVID-19 pandemic. Among other provisions, the CARES Act accelerates the remaining AMT credit refund allowances resulting in taxpayers being able to immediately claim a refund in full for any AMT credit carryforwards and deferral of certain 2020 payroll taxes. In the third quarter of 2020, Duke Energy received $572 million related to these AMT credit carryforwards and $19 million of interest income. In addition, the Company has deferred approximately $117 million of payroll taxes, with 50% payable by December 31, 2021, and the remaining 50% payable by December 31, 2022. The other provisions within the CARES Act do not materially impact Duke Energy's income tax accounting. See Note 1 for information on COVID-19.

Tax Act

On December 22, 2017, President Trump signed the Tax Act into law. Among other provisions, the Tax Act lowered the corporate federal income tax rate from 35% to 21%, limits interest deductions outside of regulated utility operations, requires the normalization of excess deferred taxes associated with property under the average rate assumption method as a prerequisite to qualifying for accelerated depreciation and repealed the federal manufacturing deduction. The Tax Act also repealed the corporate AMT and stipulates a refund of 50% of remaining AMT credit carryforwards (to the extent the credits exceed regular tax for the year) for tax years 2018, 2019, and 2020, with all remaining AMT credits to be refunded in tax year 2021.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin (SAB) 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, which provides guidance on accounting for the Tax Act's impact. SAB 118 provides a measurement period, which in no case should extend beyond one year from the Tax Act enactment date, during which a company acting in good faith may complete the accounting for the impacts of the Tax Act under ASC Topic 740. In accordance with SAB 118, a company must reflect the income tax effects of the Tax Act in the reporting period in which the accounting under ASC Topic 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete, a company can determine a reasonable estimate for those effects and record a provisional estimate in the financial statements in the first reporting period in which a reasonable estimate can be determined.

As of December 31, 2018, the accounting for the effects of the Tax Act was complete. During the year ended December 31, 2018, Duke Energy recorded the following measurement period adjustments in accordance with SAB 118:

- Additional tax expense of $23 million related to the completion of the analysis of Duke Energy's existing regulatory liability related to deferred taxes;
- A $10 million tax benefit for the remeasurement of deferred tax assets and deferred tax liabilities primarily related to the guidance on bonus depreciation issued by the IRS in August 2018, affecting the computation of the Company's 2017 Federal income tax liability;
- Additional tax expense of $7 million related to the portion of the deferred tax asset as of December 31, 2017, that represents nondeductible long-term incentives under the Tax Act's limitation on the deductibility of executive compensation; and
- During the fourth quarter of 2018, the Company released the $76 million valuation allowance that it recorded in the first quarter of

2018 as a result of additional guidance published by the IRS that stated refundable AMT credits would not be subject to sequestration.

- The majority of Duke Energy's operations are regulated and it is expected that the Subsidiary Registrants will ultimately pass on the savings associated with the amount representing the remeasurement of deferred tax balances related to regulated operations to customers. For Duke Energy's regulated operations, where the reduction is expected to be returned to customers in future rates, the remeasurement has been deferred as a regulatory liability. During 2018, Duke Energy recorded an additional regulatory liability of $83 million, representing the revaluation of those deferred tax balances. The Subsidiary Registrants continue to respond to requests from regulators in various jurisdictions to determine the timing and magnitude of savings they will pass on to customers.

In addition, during 2018, Duke Energy reclassified $573 million of AMT credit carryforwards from noncurrent deferred tax liabilities to a current federal income tax receivable. In 2019, Duke Energy received a refund of $573 million related to AMT credit carryforwards based on the filing of Duke Energy's 2018 income tax return in 2019 and reclassified $286 million of AMT credits from noncurrent deferred tax liabilities to a current federal income tax receivable.

Income Tax Expense

Components of Income Tax Expense

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current income taxes								
Federal	$ (281)	$ 314	$ 280	$ 181	$ 148	$ 10	$ 48	$ (27)
State	(9)	35	29	17	24	1	7	(8)
Foreign	1	—	—	—	—	—	—	—
Total current income taxes	(289)	349	309	198	172	11	55	(35)
Deferred income taxes								
Federal	155	(171)	(167)	(180)	1	30	12	60
State	(92)	(86)	(24)	(49)	25	2	17	(7)
Total deferred income taxes[(a)]	63	(257)	(191)	(229)	26	32	29	53
ITC amortization	(10)	(4)	(5)	(5)	—	—	—	—
Income tax (benefit) expense from continuing operations	(236)	88	113	(36)	198	43	84	18
Tax expense from discontinued operations	2	—	—	—	—	—	—	—
Total income tax (benefit) expense included in Consolidated Statements of Operations	$ (234)	$ 88	$ 113	$ (36)	$ 198	$ 43	$ 84	$ 18

(a) Total deferred income taxes includes the generation of NOL carryforwards and tax credit carryforwards of $20 million at Duke Energy Carolinas, $3 million at Duke Energy Progress, $8 million at Duke Energy Indiana, and $11 million at Piedmont. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $39 million at Progress Energy, $30 million at Duke Energy Florida and $79 million at Duke Energy.

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current income taxes								
Federal	$ (299)	$ 164	$ (173)	$ (36)	$ (43)	$ (41)	$ (23)	$ (92)
State	10	13	(7)	(3)	18	(1)	1	(1)
Foreign	2	—	—	—	—	—	—	—
Total current income taxes	(287)	177	(180)	(39)	(25)	(42)	(22)	(93)
Deferred income taxes								
Federal	855	175	422	220	153	77	128	133
State	(38)	(37)	17	(18)	27	5	28	3
Total deferred income taxes[(a)]	817	138	439	202	180	82	156	136
ITC amortization	(11)	(4)	(6)	(6)	—	—	—	—
Income tax expense from continuing operations	519	311	253	157	155	40	134	43
Tax benefit from discontinued operations	(2)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	$ 517	$ 311	$ 253	$ 157	$ 155	$ 40	$ 134	$ 43

(a) Total deferred income taxes includes the generation of tax credit carryforwards of $8 million at Duke Energy Carolinas. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $243 million at Progress Energy, $35 million at Duke Energy Progress, $152 million at Duke Energy Florida, $25 million at Duke Energy Ohio, $60 million at Duke Energy Indiana, $90 million at Piedmont and $775 million at Duke Energy.

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Current income taxes								
Federal	$ (647)	$ (8)	$ (135)	$ (71)	$ (49)	$ 20	$ 29	$ 67
State	(11)	6	(5)	(5)	(10)	(1)	3	1
Foreign	3	—	—	—	—	—	—	—
Total current income taxes	(655)	(2)	(140)	(76)	(59)	19	32	68
Deferred income taxes								
Federal	1,064	299	341	256	115	21	74	(36)
State	49	11	20	(17)	45	3	22	5
Total deferred income taxes[(a)(b)]	1,113	310	361	239	160	24	96	(31)
ITC amortization	(10)	(5)	(3)	(3)	—	—	—	—
Income tax expense from continuing operations	448	303	218	160	101	43	128	37
Tax benefit from discontinued operations	(26)	—	—	—	—	—	—	—
Total income tax expense included in Consolidated Statements of Operations	$ 422	$ 303	$ 218	$ 160	$ 101	$ 43	$ 128	$ 37

(a) Includes benefits of NOL carryforwards and tax credit carryforwards of $22 million at Duke Energy Carolinas, $293 million at Progress Energy, $59 million at Duke Energy Progress, $219 million at Duke Energy Florida, $17 million at Duke Energy Ohio, $21 million at Duke Energy Indiana and $39 million at Piedmont. In addition, total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $18 million at Duke Energy.

(b) For the year ended December 31, 2018, the Company has revised the December 31, 2017, estimates of the income tax effects of the Tax Act, in accordance with SAB 118. See the Statutory Rate Reconciliation section below for additional information on the Tax Act's impact on income tax expense.

Duke Energy Income from Continuing Operations before Income Taxes

	Years Ended December 31,		
(in millions)	2020	2019	2018
Domestic	**$ 826**	$4,053	$3,018
Foreign	**13**	44	55
Income from continuing operations before income taxes	**$ 839**	$4,097	$3,073

Statutory Rate Reconciliation

The following tables present a reconciliation of income tax expense at the U.S. federal statutory tax rate to the actual tax expense from continuing operations.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Income tax expense, computed at the statutory rate of 21%	$ 176	$ 219	$ 243	$ 80	$ 204	$ 62	$ 103	$ 61
State income tax, net of federal income tax effect	(80)	(40)	4	(25)	39	2	19	(12)
Amortization of excess deferred income tax	(276)	(82)	(118)	(68)	(49)	(20)	(36)	(21)
AFUDC equity income	(48)	(13)	(9)	(6)	(3)	(2)	(4)	(10)
AFUDC equity depreciation	103	19	10	5	5	1	4	—
Noncontrolling Interests	62	—	—	—	—	—	—	—
Renewable energy PTCs	(110)	—	—	—	—	—	—	—
Other tax credits	(37)	(13)	(16)	(14)	(2)	(1)	(3)	(2)
Tax true up	(12)	(3)	1	(5)	5	—	(1)	1
Other items, net	(14)	1	(2)	(3)	(1)	1	2	1
Income tax (benefit) expense from continuing operations	$ (236)	$ 88	$ 113	$ (36)	$ 198	$ 43	$ 84	$ 18
Effective tax rate	(28.1)%	8.4%	9.7%	(9.5)%	20.4%	14.6%	17.1%	6.2%

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Income tax expense, computed at the statutory rate of 21%	$ 860	$ 360	$ 332	$ 202	$ 178	$ 59	$ 120	$ 51
State income tax, net of federal income tax effect	(22)	(19)	8	(17)	35	3	22	2
Amortization of excess deferred income tax	(121)	(29)	(64)	(10)	(54)	(12)	(6)	(10)
AFUDC equity income	(52)	(9)	(14)	(13)	(1)	(3)	(3)	—
AFUDC equity depreciation	34	19	10	5	5	1	4	—
Renewable energy PTCs	(120)	—	—	—	—	—	—	—
Other tax credits	(23)	(11)	(9)	(7)	(2)	(1)	(1)	(1)
Tax true up	(64)	(9)	(8)	(3)	(5)	(7)	(1)	—
Other items, net	27	9	(2)	—	(1)	—	(1)	1
Income tax expense from continuing operations	$ 519	$ 311	$ 253	$ 157	$ 155	$ 40	$ 134	$ 43
Effective tax rate	12.7%	18.1%	16.0%	16.3%	18.3%	14.3%	23.5%	17.6%

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Income tax expense, computed at the statutory rate of 21%	$ 645	$ 288	$ 263	$ 174	$ 137	$ 46	$ 109	$ 35
State income tax, net of federal income tax effect	30	14	13	(17)	28	2	20	4
Amortization of excess deferred income tax	(61)	—	(55)	(1)	(54)	(3)	(2)	—
AFUDC equity income	(42)	(15)	(22)	(12)	(10)	(2)	(2)	—
AFUDC equity depreciation	31	18	9	5	4	1	4	—
Renewable energy PTCs	(129)	—	—	—	—	—	—	—
Other tax credits	(28)	(7)	(13)	(5)	(8)	(1)	(1)	(3)
Tax Act[(a)]	20	1	25	19	—	2	—	—
Other items, net	(18)	4	(2)	(3)	4	(2)	—	1
Income tax expense from continuing operations	$ 448	$ 303	$ 218	$ 160	$ 101	$ 43	$ 128	$ 37
Effective tax rate	14.6%	22.1%	17.4%	19.3%	15.4%	19.6%	24.6%	22.3%

(a) For the year ended December 31, 2018, the Company revised the December 31, 2017, estimates of the income tax effects of the Tax Act, in accordance with SAB 118. Amounts primarily include but are not limited to items that are excluded for ratemaking purposes related certain wholesale fixed-rate contracts, remeasurement of nonregulated net deferred tax liabilities, Federal NOLs, and valuation allowance on foreign tax credits.

Valuation allowances have been established for certain state NOL carryforwards and state income tax credits that reduce deferred tax assets to an amount that will be realized on a more-likely-than-not basis. The net change in the total valuation allowance is included in State income tax, net of federal income tax effect, in the above tables.

Valuation allowances have been established for foreign tax credits that reduce deferred tax assets to an amount that will be realized on a more-likely-than-not basis. The net change in the total valuation allowance is included in Tax Act in the above tables.

DEFERRED TAXES

Net Deferred Income Tax Liability Components

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Deferred credits and other liabilities	$ 286	$ 85	$ 87	$ 67	$ 18	$ 21	$ 7	$ 38
Lease obligations	515	96	208	120	87	5	16	5
Pension, post-retirement and other employee benefits	236	(30)	68	24	38	16	26	(5)
Progress Energy merger purchase accounting adjustments[(a)]	441	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	3,909	285	508	179	282	16	183	29
Regulatory liabilities and deferred credits	—	11	—	—	—	18	—	—
Investments and other assets	—	—	—	—	—	7		—
Other	93	8	14	9	4	7	1	8
Valuation allowance	(586)	—	—	—	—	—	—	—
Total deferred income tax assets	4,894	455	885	399	429	90	233	75
Investments and other assets	(2,267)	(1,127)	(669)	(507)	(164)	—	(14)	(48)
Accelerated depreciation rates	(10,729)	(3,170)	(3,868)	(1,778)	(2,124)	(1,071)	(1,433)	(844)
Regulatory assets and deferred debits, net	(1,142)	—	(744)	(412)	(332)	—	(14)	(4)
Total deferred income tax liabilities	(14,138)	(4,297)	(5,281)	(2,697)	(2,620)	(1,071)	(1,461)	(896)
Net deferred income tax liabilities	$ (9,244)	$(3,842)	$(4,396)	$(2,298)	$(2,191)	$ (981)	$(1,228)	$ (821)

(a) Primarily related to lease obligations and debt fair value adjustments.

The following table presents the expiration of tax credits and NOL carryforwards.

	December 31, 2020	
(in millions)	Amount	Expiration Year
General Business Credits	$ 2,033	2024 — 2040
Federal NOL carryforwards[(a)(f)]	154	2024 — Indefinite
Capital loss carryforward[(e)]	85	2024
State carryforwards and credits[(b)(f)]	340	2021 — Indefinite
Foreign NOL carryforwards[(c)]	12	2027 — 2037
Foreign Tax Credits[(d)]	1,272	2024 — 2027
Charitable contribution carryforwards	13	2025
Total tax credits and NOL carryforwards	$ 3,909	

(a) A valuation allowance of $4 million has been recorded on the Federal NOL carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(b) A valuation allowance of $97 million has been recorded on the state NOL and attribute carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(c) A valuation allowance of $12 million has been recorded on the foreign NOL carryforwards, as presented in the Net Deferred Income Tax Liability Components table.
(d) A valuation allowance of $388 million has been recorded on the foreign tax credits, as presented in the Net Deferred Income Tax Liability Components table.
(e) A valuation allowance of $85 million has been recorded on the Federal capital loss carryforward, as presented in the Net Deferred Income Tax Liability Components table.
(f) Indefinite carryforward for Federal NOLs, and NOLs for states that have adopted the Tax Act's NOL provisions, generated in tax years beginning after December 31, 2017.

	December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Deferred credits and other liabilities	$ 125	$ 24	$ 25	$ 49	$ —	$ 14	$ 5	$ 22
Lease obligations	462	72	193	92	102	5	17	6
Pension, post-retirement and other employee benefits	303	(5)	88	38	44	17	27	(3)
Progress Energy merger purchase accounting adjustments[(a)]	389	—	—	—	—	—	—	—
Tax credits and NOL carryforwards	3,925	262	486	176	253	16	176	19
Regulatory liabilities and deferred credits	—	—	—	—	—	36	52	42
Investments and other assets	—	—	—	—	—	10	—	2
Other	97	5	8	3	2	8	1	6
Valuation allowance	(587)	—	—	—	—	—	—	—
Total deferred income tax assets	4,714	358	800	358	401	106	278	94
Investments and other assets	(1,664)	(981)	(577)	(390)	(190)	—	(12)	—
Accelerated depreciation rates	(10,813)	(3,254)	(3,798)	(1,918)	(1,913)	(1,028)	(1,416)	(802)
Regulatory assets and deferred debits, net	(1,115)	(44)	(887)	(438)	(477)	—	—	—
Total deferred income tax liabilities	(13,592)	(4,279)	(5,262)	(2,746)	(2,580)	(1,028)	(1,428)	(802)
Net deferred income tax liabilities	$ (8,878)	$ (3,921)	$ (4,462)	$ (2,388)	$ (2,179)	$ (922)	$ (1,150)	$ (708)

(a) Primarily related to finance lease obligations and debt fair value adjustments.

UNRECOGNIZED TAX BENEFITS

The following tables present changes to unrecognized tax benefits.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	$ 126	$ 8	$ 9	$ 6	$ 3	$ 1	$ 1	$ 4
Gross decreases – tax positions in prior periods	(2)	—	—	—	—	—	—	—
Gross increases – current period tax positions	4	2	1	—	—	—	—	—
Reduction due to lapse of statute of limitations	(3)	—	—	—	—	—	—	(3)
Total changes	(1)	2	1	—	—	—	—	(3)
Unrecognized tax benefits – December 31	$ 125	$ 10	$ 10	$ 6	$ 3	$ 1	$ 1	$ 1

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	$ 24	$ 6	$ 9	$ 6	$ 3	$ 1	$ 1	$ 4
Unrecognized tax benefits increases	105	2	1	1	—	—	—	—
Gross decreases – tax positions in prior periods	(3)	—	(1)	(1)	—	—	—	—
Total changes	102	2	—	—	—	—	—	—
Unrecognized tax benefits – December 31	$ 126	$ 8	$ 9	$ 6	$ 3	$ 1	$ 1	$ 4

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Unrecognized tax benefits – January 1	$25	$ 5	$ 5	$ 5	$ 5	$ 1	$ 1	$ 3
Unrecognized tax benefits increases (decreases)								
Gross decreases – tax positions in prior periods	(2)	(1)	—	—	(4)	—	—	—
Gross increases – tax positions in prior periods	7	2	4	1	2	—	—	1
Decreases due to settlements	(6)	—	—	—	—	—	—	—
Total changes	(1)	1	4	1	(2)	—	—	1
Unrecognized tax benefits – December 31	$24	$ 6	$ 9	$ 6	$ 3	$ 1	$ 1	$ 4

The following table includes additional information regarding the Duke Energy Registrants' unrecognized tax benefits at December 31, 2020. Duke Energy Registrants do not anticipate a material increase or decrease in unrecognized tax benefits within the next 12 months.

	December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Amount that if recognized, would affect the effective tax rate or regulatory liability[(a)]	$ 122	$ 10	$ 10	$ 6	$ 3	$ 1	$ 1	$ 1

(a) The Duke Energy Registrants are unable to estimate the specific amounts that would affect the ETR versus the regulatory liability.

Duke Energy and its subsidiaries are no longer subject to U.S. federal examination for years before 2016. With few exceptions, Duke Energy and its subsidiaries are no longer subject to state, local or non-U.S. income tax examinations by tax authorities for years before 2016.

24. OTHER INCOME AND EXPENSES, NET

The components of Other income and expenses, net on the Consolidated Statements of Operations are as follows.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 32	$ 4	$ 8	$ 2	$ 6	$ 4	$ 6	$ 17
AFUDC equity	154	62	42	29	12	7	23	19
Post in-service equity returns	27	17	8	8	—	1	1	—
Nonoperating income, other	240	94	71	36	35	4	7	15
Other income and expense, net	$453	$177	$129	$ 75	$ 53	$ 16	$ 37	$ 51

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 31	$ 1	$ 11	$ —	$ 11	$ 10	$ 10	$ 1
AFUDC equity	139	42	66	60	6	13	18	—
Post in-service equity returns	29	20	7	7	—	1	—	—
Nonoperating income, other	231	88	57	33	31	—	13	19
Other income and expense, net	$430	$151	$141	$ 100	$ 48	$ 24	$ 41	$ 20

	Year Ended December 31, 2018							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Interest income	$ 20	$ 1	$ 18	$ 1	$ 18	$ 7	$ 9	$ 1
AFUDC equity	221	73	104	57	47	11	32	—
Post in-service equity returns	15	9	5	5	—	1	—	—
Nonoperating income, other	143	70	38	24	21	4	4	13
Other income and expense, net	$399	$153	$165	$ 87	$ 86	$ 23	$ 45	$ 14

25. SUBSEQUENT EVENTS

For information on subsequent events related to the sale of a minority interest in Duke Energy Indiana and regulatory matters, see Notes 1 and 3, respectively.

In February 2021, a severe winter storm impacted certain Commercial Renewables assets in Texas. Extreme weather conditions limited the ability for these solar and wind facilities to generate and sell electricity into the Electric Reliability Council of Texas market. The financial impact of the storm is estimated to be between approximately $75 million and $100 million on a pre-tax basis.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed by the Duke Energy Registrants in the reports they file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified by the SEC rules and forms.

Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by the Duke Energy Registrants in the reports they file or submit under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, the Duke Energy Registrants have evaluated the effectiveness of their disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2020, and, based upon this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these controls and procedures are effective in providing reasonable assurance of compliance.

Changes in Internal Control Over Financial Reporting

Under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, the Duke Energy Registrants have evaluated changes in internal control over financial reporting (as such term is defined in Rules 13a-15 and 15d-15 under the Exchange Act) that occurred during the fiscal quarter ended December 31, 2020, and have concluded no change has materially affected, or is reasonably likely to materially affect, internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

The Duke Energy Registrants' management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). The Duke Energy Registrants' internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes, in accordance with GAAP. Due to inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of the internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies and procedures may deteriorate.

The Duke Energy Registrants' management, including their Chief Executive Officer and Chief Financial Officer, has conducted an evaluation of the effectiveness of their internal control over financial reporting as of December 31, 2020, based on the framework in the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that its internal controls over financial reporting were effective as of December 31, 2020.

Deloitte & Touche LLP, Duke Energy's independent registered public accounting firm, has issued an attestation report on the effectiveness of Duke Energy's internal control over financial reporting, which is included herein. This report is not applicable to the Subsidiary Registrants as these companies are not accelerated or large accelerated filers.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Duke Energy Corporation and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 25, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
February 25, 2021

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding Duke Energy's Executive Officers is set forth in Part I, Item 1, "Business – Information about Our Executive Officers," in this Annual Report on Form 10-K. Duke Energy will provide information that is responsive to the remainder of this Item 10 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 10 by reference.

ITEM 11. EXECUTIVE COMPENSATION

Duke Energy will provide information that is responsive to this Item 11 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 11 by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

The following table shows information as of December 31, 2020, about securities to be issued upon exercise of outstanding options, warrants and rights under Duke Energy's equity compensation plans, along with the weighted average exercise price of the outstanding options, warrants and rights and the number of securities remaining available for future issuance under the plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)(1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	3,256,542(2)	n/a	4,450,675(3)
Equity compensation plans not approved by security holders	143,272(4)	n/a	n/a(5)
Total	3,399,814	n/a	4,450,675

(1) As of December 31, 2020, no options were outstanding under equity compensation plans.
(2) Includes RSUs and performance shares (assuming the maximum payout level) granted under the Duke Energy Corporation 2015 Long-Term Incentive Plan, as well as shares that could be payable with respect to certain compensation deferred under the Duke Energy Corporation Executive Savings Plan (Executive Savings Plan) or the Directors' Savings Plan.
(3) Includes shares remaining available for issuance pursuant to stock awards under the Duke Energy Corporation 2015 Long-Term Incentive Plan.
(4) Includes shares that could be payable with respect to certain compensation deferred under the Executive Savings Plan or the Duke Energy Corporation Directors' Savings Plan (Directors' Savings Plan), each of which is a non-qualified deferred compensation plan described in more detail below.
(5) The number of shares remaining available for future issuance under equity compensation plans not approved by security holders cannot be determined because it is based on the amount of future voluntary deferrals, if any, under the Executive Savings Plan and the Directors' Savings Plan.

Under the Executive Savings Plan, participants can elect to defer a portion of their base salary and short-term incentive compensation. Participants also receive a company matching contribution in excess of the contribution limits prescribed by the Internal Revenue Code under the Duke Energy Retirement Savings Plan, which is the 401(k) plan in which employees are generally eligible to participate. Eligible participants may also earn pay credits based on age and length of service on eligible earnings that exceed limited prescribed by the Internal Revenue Code.

In general, payments are made following termination of employment or death in the form of a lump sum or installments, as selected by the participant. Participants may direct the deemed investment of their accounts (with certain exceptions) among investment options available under the Duke Energy Retirement Savings Plan, including the Duke Energy Common Stock Fund. Participants may change their investment elections on a daily basis. Deferrals of equity awards are credited with earnings and losses based on the performance of the Duke Energy Common Stock Fund. The benefits payable under the plan are unfunded and subject to the claims of Duke Energy's creditors.

Under the Directors' Savings Plan, outside directors may elect to defer all or a portion of their annual compensation, generally consisting of retainers. Deferred amounts are credited to an unfunded account, the balance of which is adjusted for the performance of phantom investment options, including the Duke Energy Common Stock Fund, as elected by the director, and generally are paid when the director terminates his or her service from the Board of Directors.

Duke Energy will provide additional information that is responsive to this Item 12 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 12 by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Duke Energy will provide information that is responsive to this Item 13 in its definitive proxy statement or in an amendment to this Annual Report not later than 120 days after the end of the fiscal year covered by this Annual Report. That information is incorporated in this Item 13 by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Deloitte provided professional services to the Duke Energy Registrants. The following tables present the Deloitte fees for services rendered to the Duke Energy Registrants during 2020 and 2019.

	Year Ended December 31, 2020							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Types of Fees								
Audit Fees[a]	$12.9	$3.0	$ 4.5	$2.3	$ 2.2	$ 1.9	$ 1.7	$ 1.3
Audit-Related Fees[b]	1.7	0.2	0.3	0.1	0.2	0.3	0.1	—
Tax Fees[c]	0.1	—	—	—	—	—	—	—
Total Fees	$14.7	$3.2	$ 4.8	$2.4	$ 2.4	$ 2.2	$ 1.8	$ 1.3

	Year Ended December 31, 2019							
(in millions)	Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
Types of Fees								
Audit Fees[a]	$ 13.5	$ 4.6	$ 5.3	$ 3.1	$ 2.2	$ 0.9	$ 1.4	$ 0.8
Audit-Related Fees[b]	0.6	0.1	0.2	0.1	0.1	0.2	—	—
Tax Fees[c]	0.2	0.1	0.1	—	—	—	—	—
Total Fees	$ 14.3	$ 4.8	$ 5.6	$ 3.2	$ 2.3	$ 1.1	$ 1.4	$ 0.8

(a) Audit Fees are fees billed, or expected to be billed, by Deloitte for professional services for the financial statement audits, audit of the Duke Energy Registrants' financial statements included in the Annual Report on Form 10-K, reviews of financial statements included in Quarterly Reports on Form 10-Q, and services associated with securities filings such as comfort letters and consents.

(b) Audit-Related Fees are fees billed, or expected to be billed, by Deloitte for assurance and related services that are reasonably related to the performance of an audit or review of financial statements, including statutory reporting requirements.

(c) Tax Fees are fees billed by Deloitte for tax return assistance and preparation, tax examination assistance and professional services related to tax planning and tax strategy.

To safeguard the continued independence of the independent auditor, the Audit Committee of Duke Energy adopted a policy that all services provided by the independent auditor require preapproval by the Audit Committee. Pursuant to the policy, certain audit services, audit-related services, tax services and other services have been specifically preapproved up to fee limits. In the event the cost of any of these services may exceed the fee limits, the Audit Committee must specifically approve the service. All services performed in 2020 and 2019 by the independent accountant were approved by the Audit Committee pursuant to the preapproval policy.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Consolidated Financial Statements and Supplemental Schedules included in Part II of this Annual Report are as follows:

Duke Energy Corporation

Consolidated Financial Statements
Consolidated Statements of Operations for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019 and 2018
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Duke Energy Carolinas, LLC

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019 and 2018
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Progress Energy, Inc.

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019 and 2018
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Duke Energy Progress, LLC

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019 and 2018
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Duke Energy Florida, LLC

Consolidated Financial Statements
Consolidated Statements of Operations and Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Balance Sheets as of December 31, 2020, and 2019
Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019 and 2018
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm
All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

PART IV

Duke Energy Ohio, Inc.

All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Duke Energy Indiana, LLC

All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

Piedmont Natural Gas Company, Inc.

All other schedules are omitted because they are not required, or because the required information is included in the Consolidated Financial Statements or Notes.

PART IV

EXHIBIT INDEX

Exhibits filed herewith are designated by an asterisk (*). All exhibits not so designated are incorporated by reference to a prior filing, as indicated. Items constituting management contracts or compensatory plans or arrangements are designated by a double asterisk (**). The Company agrees to furnish upon request to the Commission a copy of any omitted schedules or exhibits upon request on all items designated by a triple asterisk (***).

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
2.1	Agreement and Plan of Merger between Duke Energy Corporation, Diamond Acquisition Corporation and Progress Energy, Inc., dated as of January 8, 2011 (incorporated by reference to Exhibit 2.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 11, 2011, File No. 1-32853).	X		X					
2.2	Agreement and Plan of Merger between Piedmont Natural Gas Company, Duke Energy Corporation and Forest Subsidiary, Inc. (incorporated by reference to Exhibit 2.1 to Duke Energy Corporation's Current Report on Form 8-K filed on October 26, 2015, File No. 1-32853).	X							X
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Duke Energy Corporation's Current Report on Form 8-K filed on May 20, 2014, File No. 1-32853).	X							
3.2	Amended and Restated By-Laws of Duke Energy Corporation (incorporated by reference to Exhibit 3.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 4, 2016, File No. 1-32853).	X							
3.3	Articles of Organization including Articles of Conversion (incorporated by reference to Exhibit 3.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on April 7, 2006, File No. 1-4928).		X						
3.3.1	Amended Articles of Organization, effective October 1, 2006 (incorporated by reference to Exhibit 3.1 to Duke Energy Carolinas, LLC's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 13, 2006, File No. 1-4928).		X						
3.4	Amended Articles of Incorporation of Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company), effective October 23, 1996, (incorporated by reference to Exhibit 3(a) to registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996, filed on November 13, 1996, File No. 1-1232).						X		
3.4.1	Amended Articles of Incorporation, effective September 19, 2006 (incorporated by reference to Exhibit 3.1 to Duke Energy Ohio Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 17, 2006, File No. 1-1232).						X		
3.5	Certificate of Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.1	Articles of Entity Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.2	Plan of Entity Conversion of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.3 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.3	Articles of Organization of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.4 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.5.4	Limited Liability Company Operating Agreement of Duke Energy Indiana, LLC (incorporated by reference to Exhibit 3.5 to registrant's Current Report on Form 8-K filed on January 4, 2016, File No. 1-3543).							X	
3.6	Limited Liability Company Operating Agreement of Duke Energy Carolinas, LLC (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on April 7, 2006, File No. 1-4928).		X						

PART IV

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
3.7	Regulations of Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company), effective July 23, 2003 (incorporated by reference to Exhibit 3.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 13, 2003, File No. 1-1232).						X		
3.8	Articles of Organization including Articles of Conversion for Duke Energy Progress, LLC (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.8.1	Plan of Conversion of Duke Energy Progress, Inc. (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.8.2	Limited Liability Company Operating Agreement of Duke Energy Progress, LLC (incorporated by reference to Exhibit 3.3 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3382).				X				
3.9	Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective June 15, 2000 (incorporated by reference to Exhibit 3(a)(1) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, filed on August 14, 2000, File No. 1-3382).			X					
3.9.1	Articles of Amendment to the Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective December 4, 2000 (incorporated by reference to Exhibit 3(b)(1) to registrant's Annual Report on Form 10-K for the year ended December 31, 2001, filed on March 28, 2002, File No. 1-3382).			X					
3.9.2	Articles of Amendment to the Amended and Restated Articles of Incorporation of Progress Energy, Inc. (formerly CP&L Energy Inc.), effective May 10, 2006 (incorporated by reference to Exhibit 3(a) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-15929).			X					
3.9.3	By-Laws of Progress Energy, Inc. (formerly CP&L Energy, Inc.), effective May 10, 2006 (incorporated by reference to Exhibit 3(b) to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-15929).			X					
3.10	Articles of Conversion for Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.4 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).					X			
3.10.1	Articles of Organization for Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.5 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).					X			
3.10.2	Plan of Conversion of Duke Energy Florida, Inc. (incorporated by reference to Exhibit 3.6 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).					X			
3.10.3	Limited Liability Company Operating Agreement of Duke Energy Florida, LLC (incorporated by reference to Exhibit 3.7 to registrant's Current Report on Form 8-K filed on August 4, 2015, File No. 1-3274).					X			
3.11	Amended and Restated Articles of Incorporation of Piedmont Natural Gas Company, Inc., dated as of October 3, 2016 (incorporated by reference to Exhibit 3.1 to registrant's Annual Report on Form 10-K for the fiscal year ended October 31, 2016, filed on December 22, 2016, File No. 001-06196).								X
3.11.1	Bylaws of Piedmont Natural Gas Company, Inc., as amended and restated effective October 3, 2016 (incorporated by reference to Exhibit 3.2 to registrant's Current Report on Form 8-K filed on October 3, 2016, File No. 1-06196).								X
3.12	Certificate of Designations with respect to Series A Preferred Stock, dated March 28, 2019 (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on March 29, 2019, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
3.13	Certificate of Designation with respect to the Series B Preferred Stock, dated September 11, 2019 (incorporated by reference to Exhibit 3.1 to registrant's Current Report on Form 8-K filed on September 12, 2019, File No. 1-32853).	X							
3.14	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896,under the headings "Description of Common Stock," "Description of Preferred Stock," "Description of Depositary Shares," "Description of Stock Purchase Contracts and Stock Purchase Units," and "Description of Debt Securities").	X							
3.15	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-01, under the heading "Description of Debt Securities").								X
3.16	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-02, under the headings "Description of First Mortgage Bonds" and "Description of Debt Securities").				X				
3.17	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-03, under the headings "Description of First Mortgage Bonds" and "Description of Unsecured Debt Securities").						X		
3.18	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-04, under the headings "Description of First Mortgage Bonds" and "Description of Unsecured Debt Securities").							X	
3.19	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-05, under the headings "Description of First Mortgage Bonds" and "Description of Debt Securities").					X			
3.20	Description of Registered Securities (incorporated by reference from the registrant's prospectus contained in Form S-3 filed on September 23, 2019, File No. 333-233896-06, under the headings "Description of First and Refunding Mortgage Bonds," "Description of Senior Notes," and "Description of Subordinate Notes").		X						
4.1	Indenture between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of June 3, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 16, 2008, File No. 1-32853)	X							
4.1.1	First Supplemental Indenture, dated as of June 16, 2008 (incorporated by reference to Exhibit 4.2 to Duke Energy Corporation's Current Report on Form 8-K filed on June 16, 2008, File No. 1-32853).	X							
4.1.2	Second Supplemental Indenture, dated as of January 26, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on January 26, 2009, File No. 1-32853).	X							
4.1.3	Third Supplemental Indenture, dated as of August 28, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 28, 2009, File No. 1-32853).	X							
4.1.4	Fourth Supplemental Indenture, dated as of March 25, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on March 25, 2010, File No. 1-32853).	X							
4.1.5	Fifth Supplemental Indenture, dated as of August 25, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 25, 2011, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.1.6	Sixth Supplemental Indenture, dated as of November 17, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on November 17, 2011, File No. 1-32853).	X							
4.1.7	Seventh Supplemental Indenture, dated as of August 16, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on August 16, 2012, File No. 1-32853).	X							
4.1.8	Eighth Supplemental Indenture, dated as of January 14, 2013 (incorporated by reference to Exhibit 2 to the Registration Statement of Form 8-A of Duke Energy Corporation filed on January 14, 2013, File No. 1-32853).	X							
4.1.9	Ninth Supplemental Indenture, dated as of June 13, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 13, 2013, File No. 1-32853).	X							
4.1.10	Tenth Supplemental Indenture, dated as of October 11, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on October 11, 2013, File No. 1-32853).	X							
4.1.11	Eleventh Supplemental Indenture, dated as of April 4, 2014 (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Current Report on Form 8-K filed on April 4, 2014, File No. 1-32853).	X							
4.1.12	Twelfth Supplemental Indenture, dated as of November 19, 2015 (incorporated by reference to Exhibit 4.2 to Duke Energy Corporation's Current Report on Form 8-K filed on November 19, 2015, File No. 1-32853).	X							
4.1.13	Thirteenth Supplemental Indenture, dated as of April 18, 2016, to the indenture dated as of June 3, 2008, between Duke Energy Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed on May 5, 2016, File No. 1-32853).	X							
4.1.14	Fourteenth Supplemental Indenture, dated as of August 12, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 12, 2016, File No. 1-32853).	X							
4.1.15	Fifteenth Supplemental Indenture, dated as of April 11, 2017 (incorporated by reference to Exhibit 4.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 9, 2017, File No. 1-32853).	X							
4.1.16	Sixteenth Supplemental Indenture, dated as of June 13, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed on August 3, 2017, File No. 1-32853).	X							
4.1.17	Seventeenth Supplemental Indenture, dated as of August 10, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 10, 2017, File No. 1-32853).	X							
4.1.18	Eighteenth Supplemental Indenture, dated as of March 29, 2018 (incorporated by reference to Exhibit 4.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 10, 2018, File No. 1-32853).	X							
4.1.19	Nineteenth Supplemental Indenture, dated as of May 16, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed on August 2, 2018, File No. 1-32853).	X							
4.1.20	Twentieth Supplemental Indenture (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form 8-A filed on September 17, 2018, File No. 1-32853).	X							
4.1.21	Twenty-first Supplemental Indenture (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 11, 2019, File no. 1-32853).	X							
4.1.22	Twenty-second Supplemental Indenture, dated as of June 7, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 7, 2019, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.1.23	Twenty-third Supplemental Indenture, dated as of May 15, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 15, 2020, File No. 1-32853).	X							
4.1.24	Twenty-fourth Supplemental Indenture, dated as of September 11, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 11, 2020, File No. 1-32853).	X							
4.2	Senior Indenture between Duke Energy Carolinas, LLC and The Bank of New York Mellon Trust Company, N.A., as successor trustee to JPMorgan Chase Bank (formerly known as The Chase Manhattan Bank), dated as of September 1, 1998 (incorporated by reference to Exhibit 4-D-1 to registrant's Post-Effective Amendment No. 2 to Registration Statement on Form S-3 filed on April 7, 1999, File No. 333-14209).		X						
4.2.1	Fifteenth Supplemental Indenture, dated as of April 3, 2006 (incorporated by reference to Exhibit 4.4.1 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483-03).		X						
4.2.2	Sixteenth Supplemental Indenture, dated as of June 5, 2007 (incorporated by reference to Exhibit 4.1 registrant's Current Report on Form 8-K filed on June 6, 2007, File No. 1-4928).		X						
4.3	First and Refunding Mortgage from Duke Energy Carolinas, LLC to The Bank of New York Mellon Trust Company, N.A., successor trustee to Guaranty Trust Company of New York, dated as of December 1, 1927 (incorporated by reference to Exhibit 7(a) to registrant's Form S-1, effective October 15, 1947, File No. 2-7224).		X						
4.3.1	Instrument of Resignation, Appointment and Acceptance among Duke Energy Carolinas, LLC, JPMorgan Chase Bank, N.A., as Trustee, and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of September 24, 2007, (incorporated by reference to Exhibit 4.6.1 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483).		X						
4.3.2	Ninth Supplemental Indenture, dated as of February 1, 1949 (incorporated by reference to Exhibit 7(j) to registrant's Form S-1 filed on February 3, 1949, File No. 2-7808).		X						
4.3.3	Twentieth Supplemental Indenture, dated as of June 15, 1964 (incorporated by reference to Exhibit 4-B-20 to registrant's Form S-1 filed on August 23, 1966, File No. 2-25367).		X						
4.3.4	Twenty-third Supplemental Indenture, dated as of February 1, 1968 (incorporated by reference to Exhibit 2-B-26 to registrant's Form S-9 filed on January 21, 1969, File No. 2-31304).		X						
4.3.5	Sixtieth Supplemental Indenture, dated as of March 1, 1990 (incorporated by reference to Exhibit 4-B-61 to registrant's Annual Report on Form 10-K for the year ended December 31, 1990, File No. 1-4928).		X						
4.3.6	Sixty-third Supplemental Indenture, dated as of July 1, 1991 (incorporated by reference to Exhibit 4-B-64 to registrant's Registration Statement on Form S-3 filed on February 13, 1992, File No. 33-45501).		X						
4.3.7	Eighty-fourth Supplemental Indenture, dated as of March 20, 2006 (incorporated by reference to Exhibit 4.6.9 to registrant's Registration Statement on Form S-3 filed on October 3, 2007, File No. 333-146483-03).		X						
4.3.8	Eighty-fifth Supplemental Indenture, dated as of January 10, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on January 11, 2008, File No. 1-4928).		X						
4.3.9	Eighty-seventh Supplemental Indenture, dated as of April 14, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on April 15, 2008, File No. 1-4928).		X						

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.3.10	Eighty-eighth Supplemental Indenture, dated as of November 17, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 20, 2008, File No. 1-4928).		X						
4.3.11	Ninetieth Supplemental Indenture, dated as of November 19, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 19, 2009, File No. 1-4928).		X						
4.3.12	Ninety-first Supplemental Indenture, dated as of June 7, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on June 7, 2010, File No. 1-4928).		X						
4.3.13	Ninety-third Supplemental Indenture, dated as of May 19, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on May 19, 2011, File No. 1-4928).		X						
4.3.14	Ninety-fourth Supplemental Indenture, dated as of December 8, 2011 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on December 8, 2011, File No. 1-4928).		X						
4.3.15	Ninety-fifth Supplemental Indenture, dated as of September 21, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on September 21, 2012, File No. 1-4928).		X						
4.3.16	Ninety-sixth Supplemental Indenture, dated as of March 12, 2015, between Duke Energy Carolinas, LLC and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on March 12, 2015, File No. 1-4928).		X						
4.3.17	Ninety-seventh Supplemental Indenture, dated as of March 11, 2016 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on March 11, 2016, File No. 1-4928).		X						
4.3.18	Ninety-eighth Supplemental Indenture, dated as of November 17, 2016 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC's Current Report on Form 8-K filed on November 17, 2016, File No. 1-4928).		X						
4.3.19	Ninety-ninth Supplemental Indenture, dated as of November 14, 2017 (incorporated by reference to Exhibit 4.1 to Duke Energy Carolinas, LLC Current Report on Form 8-K filed on November 14, 2017, File No. 1-4928).		X						
4.3.20	One Hundredth Supplemental Indenture, dated as of March 1, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 1, 2018, File No. 1-4928).		X						
4.3.21	One-Hundred and Second Supplemental Indenture, dated as of August 14, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 14, 2019, File No. 1-04928).		X						
4.3.22	One-Hundred and Third Supplemental Indenture, dated as of January 8, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on January 8, 2020, File No. 1-4928)		X						
4.3.23	One-Hundred and Fourth Supplemental Indenture, dated as of January 8, 2020 (incorporated by reference to Exhibit 4.3 to registrant's Current Report on Form 8-K filed on January 8, 2020, File No. 1-4928).		X						
4.4	Mortgage and Deed of Trust between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and The Bank of New York Mellon (formerly Irving Trust Company) and Frederick G. Herbst (Tina D. Gonzalez, successor), as Trustees, dated as of May 1, 1940.				X				
4.4.1	First through Fifth Supplemental Indentures thereto (incorporated by reference to Exhibit 2(b), File No. 2-64189).				X				
4.4.2	Sixth Supplemental Indenture dated April 1, 1960 (incorporated by reference to Exhibit 2(b)-5, File No. 2-16210).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.4.3	Seventh Supplemental Indenture dated November 1, 1961 (incorporated by reference to Exhibit 2(b)-6, File No. 2-16210).				X				
4.4.4	Eighth Supplemental Indenture dated July 1, 1964 (incorporated by reference to Exhibit 4(b)-8, File No. 2-19118).				X				
4.4.5	Ninth Supplemental Indenture dated April 1, 1966 (incorporated by reference to Exhibit 4(b)-2, File No. 2-22439).				X				
4.4.6	Tenth Supplemental Indenture dated October 1, 1967 (incorporated by reference to Exhibit 4(b)-2, File No. 2-24624).				X				
4.4.7	Eleventh Supplemental Indenture dated October 1, 1968 (incorporated by reference to Exhibit 2(c), File No. 2-27297).				X				
4.4.8	Twelfth Supplemental Indenture dated January 1, 1970 (incorporated by reference to Exhibit 2(c), File No. 2-30172).				X				
4.4.9	Thirteenth Supplemental Indenture dated August 1, 1970 (incorporated by reference to Exhibit 2(c), File No. 2-35694).				X				
4.4.10	Fourteenth Supplemental Indenture dated January 1, 1971 (incorporated by reference to Exhibit 2(c), File No. 2-37505).				X				
4.4.11	Fifteenth Supplemental Indenture dated October 1, 1971 (incorporated by reference to Exhibit 2(c), File No. 2-39002).				X				
4.4.12	Sixteenth Supplemental Indenture dated May 1, 1972 (incorporated by reference to Exhibit 2(c), File No. 2-41738).				X				
4.4.13	Seventeenth Supplemental Indenture dated November 1, 1973 (incorporated by reference to Exhibit 2(c), File No. 2-43439).				X				
4.4.14	Eighteenth Supplemental Indenture dated (incorporated by reference to Exhibit 2(c), File No. 2-47751).				X				
4.4.15	Nineteenth Supplemental Indenture dated May 1, 1974 (incorporated by reference to Exhibit 2(c), File No. 2-49347).				X				
4.4.16	Twentieth Supplemental Indenture dated December 1, 1974 (incorporated by reference to Exhibit 2(c), File No. 2-53113).				X				
4.4.17	Twenty-first Supplemental Indenture dated April 15, 1975 (incorporated by reference to Exhibit 2(d), File No. 2-53113).				X				
4.4.18	Twenty-second Supplemental Indenture dated October 1, 1977 (incorporated by reference to Exhibit 2(c), File No. 2-59511).				X				
4.4.19	Twenty-third Supplemental Indenture dated June 1, 1978 (incorporated by reference to Exhibit 2(c), File No. 2-61611).				X				
4.4.20	Twenty-fourth Supplemental Indenture dated May 15, 1979 (incorporated by reference to Exhibit 2(d), File No. 2-64189).				X				
4.4.21	Twenty-fifth Supplemental Indenture dated November 1, 1979 (incorporated by reference to Exhibit 2(c), File No. 2-65514).				X				
4.4.22	Twenty-sixth Supplemental Indenture dated November 1, 1979 (incorporated by reference to Exhibit 2(c), File No. 2-66851).				X				
4.4.23	Twenty-seventh Supplemental Indenture dated April 1, 1980 (incorporated by reference to Exhibit 2 (d), File No. 2-66851).				X				
4.4.24	Twenty-eighth Supplemental Indenture dated October 1, 1980 (incorporated by reference to Exhibit 4(b)-1, File No. 2-81299).				X				
4.4.25	Twenty-ninth Supplemental Indenture dated October 1, 1980 (incorporated by reference to Exhibit 4(b)-2, File No. 2-81299).				X				
4.4.26	Thirtieth Supplemental Indenture dated December 1, 1982 (incorporated by reference to Exhibit 4(b)- 3, File No. 2-81299).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.4.27	Thirty-first Supplemental Indenture dated March 15, 1983 (incorporated by reference to Exhibit 4(c)-1, File No. 2-95505).				X				
4.4.28	Thirty-second Supplemental Indenture dated March 15, 1983 (incorporated by reference to Exhibit 4(c)-2, File No. 2-95505).				X				
4.4.29	Thirty-third Supplemental Indenture dated December 1, 1983 (incorporated by reference to Exhibit 4(c)-3, File No. 2-95505).				X				
4.4.30	Thirty-fourth Supplemental Indenture dated December 15, 1983 (incorporated by reference to Exhibit 4(c)-4, File No. 2-95505).				X				
4.4.31	Thirty-fifth Supplemental Indenture dated April 1, 1984 (incorporated by reference to Exhibit 4(c)-5, File No. 2-95505).				X				
4.4.32	Thirty-sixth Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)-6, File No. 2-95505).				X				
4.4.33	Thirty-seventh Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)-7, File No. 2-95505).				X				
4.4.34	Thirty-eighth Supplemental Indenture dated June 1, 1984 (incorporated by reference to Exhibit 4(c)- 8, File No. 2-95505).				X				
4.4.35	Thirty-ninth Supplemental Indenture dated April 1, 1985 (incorporated by reference to Exhibit 4(b), File No. 33-25560).				X				
4.4.36	Fortieth Supplemental Indenture dated October 1, 1985 (incorporated by reference to Exhibit 4(c), File No. 33-25560).				X				
4.4.37	Forty-first Supplemental Indenture dated March 1, 1986 (incorporated by reference to Exhibit 4(d), File No. 33-25560).				X				
4.4.38	Forty-second Supplemental Indenture dated July 1, 1986 (incorporated by reference to Exhibit 4(e), File No. 33-25560).				X				
4.4.39	Forty-third Supplemental Indenture dated January 1, 1987 (incorporated by reference to Exhibit 4(f), File No. 33-25560).				X				
4.4.40	Forty-fourth Supplemental Indenture dated December 1, 1987 (incorporated by reference to Exhibit 4(g), File No. 33-25560).				X				
4.4.41	Forty-fifth Supplemental Indenture dated September 1, 1988 (incorporated by reference to Exhibit 4(h), File No. 33-25560).				X				
4.4.42	Forty-sixth Supplemental Indenture dated April 1, 1989 (incorporated by reference to Exhibit 4(b), File No. 33-33431).				X				
4.4.43	Forty-seventh Supplemental Indenture dated August 1, 1989 (incorporated by reference to Exhibit 4(c), File No. 33-33431).				X				
4.4.44	Forty-eighth Supplemental Indenture dated November 15, 1990 (incorporated by reference to Exhibit 4(b), File No. 33-38298).				X				
4.4.45	Forty-ninth Supplemental Indenture dated November 15, 1990 (incorporated by reference to Exhibit 4(c), File No. 33-38298).				X				
4.4.46	Fiftieth Supplemental Indenture dated February 15, 1991 (incorporated by reference to Exhibit 4(h), File No. 33-42869).				X				
4.4.47	Fifty-first Supplemental Indenture dated April 1, 1991 (incorporated by reference to Exhibit 4(i), File No. 33-42869).				X				
4.4.48	Fifty-second Supplemental Indenture dated September 15, 1991(incorporated by reference to Exhibit 4(e), File No. 33-48607).				X				
4.4.49	Fifty-third Supplemental Indenture dated January 1, 1992 (incorporated by reference to Exhibit 4(f), File No. 33-48607).				X				
4.4.50	Fifty-fourth Supplemental Indenture dated April 15, 1992 (incorporated by reference to Exhibit 4 (g), File No. 33-48607).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.4.51	Fifty-fifth Supplemental Indenture dated July 1, 1992 (incorporated by reference to Exhibit 4(e), File No. 33-55060).				X				
4.4.52	Fifty-sixth Supplemental Indenture dated October 1, 1992 (incorporated by reference to Exhibit 4(f), File No. 33-55060).				X				
4.4.53	Fifty-seventh Supplemental Indenture dated February 1, 1993 (incorporated by reference to Exhibit 4(e), File No. 33-60014).				X				
4.4.54	Fifty-eighth Supplemental Indenture dated March 1, 1993 (incorporated by reference to Exhibit 4(f), File No. 33-60014).				X				
4.4.55	Fifty-ninth Supplemental Indenture dated July 1 1993 (incorporated by reference to Exhibit 4(a) to Post-Effective Amendment No. 1, File No. 33-38349).				X				
4.4.56	Sixtieth Supplemental Indenture dated July 1, 1993 (incorporated by reference to Exhibit 4(b) to Post-Effective Amendment No. 1, File No. 33-38349).				X				
4.4.57	Sixty-first Supplemental Indenture dated August 15, 1993 (incorporated by reference to Exhibit 4(e), File No. 33-50597).				X				
4.4.58	Sixty-second Supplemental Indenture dated January 15, 1994 (incorporated by reference to Exhibit 4 to Duke Energy Progress' Current Report on Form 8-K dated January 19, 1994, File No. 1-3382).				X				
4.4.59	Sixty-third Supplemental Indenture dated May 1, 1994 (incorporated by reference to Exhibit 4(f) for Duke Energy Progress' Form S-3, File No. 033-57835).				X				
4.4.60	Sixty-fourth Supplemental Indenture dated August 15, 1997 (incorporated by reference to Exhibit to Duke Energy Progress' Current Report on Form 8-K dated August 26, 1997, File No. 1-3382).				X				
4.4.61	Sixty-fifth Supplemental Indenture dated April 1, 1998 (incorporated by reference to Exhibit 4(b) for Duke Energy Progress' Registration Statement on Form S-3 filed December 18, 1998, File No. 333-69237).				X				
4.4.62	Sixty-sixth Supplemental Indenture dated March 1, 1999 (incorporated by reference to Exhibit 4(c) to Duke Energy Progress' Current Report on Form 8-K filed on March 19, 1999, File No. 1-3382).				X				
4.4.63	Form of Carolina Power & Light Company First Mortgage Bond, 6.80% Series Due August 15, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Progress' Form 10-Q for the period ended September 30, 1998, File No. 1-3382).				X				
4.4.64	Sixty-eighth Supplemental Indenture dated April 1, 2000 (incorporated by reference to Exhibit No. 4(b) to Duke Energy Progress' Current Report on Form 8-K filed on April 20, 2000, File No. 1-3382).				X				
4.4.65	Sixty-ninth Supplemental Indenture dated June 1, 2000 (incorporated by reference to Exhibit No. 4b(2) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2000, filed on March 29, 2001, File No. 1-3382).				X				
4.4.66	Seventieth Supplemental Indenture dated July 1, 2000 (incorporated by reference to Exhibit 4b(3) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2000, filed on March 29, 2001, File No. 1-3382).				X				
4.4.67	Seventy-first Supplemental Indenture dated February 1, 2002 (incorporated by reference to Exhibit 4b(2) to Duke Energy Progress' Annual Report on Form 10-K for the year ended December 31, 2001, filed on March 28, 2002, File No. 1-3382 and 1-15929).				X				
4.4.68	Seventy-second Supplemental Indenture, dated as of September 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on September 12, 2003, File No. 1-3382).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.4.69	Seventy-third Supplemental Indenture, dated as of March 1, 2005 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 22, 2005, File No. 1-3382).				X				
4.4.70	Seventy-fourth Supplemental Indenture, dated as of November 1, 2005 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on November 30, 2005, File No. 1-3382).				X				
4.4.71	Seventy-fifth Supplemental Indenture, dated as of March 1, 2008 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 13, 2008, File No. 1-3382).				X				
4.4.72	Seventy-sixth Supplemental Indenture, dated as of January 1, 2009 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on January 15, 2009, File No. 1-3382).				X				
4.4.73	Seventy-seventh Supplemental Indenture, dated as of June 18, 2009 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on June 23, 2009, File No. 1-3382).				X				
4.4.74	Seventy-eighth Supplemental Indenture, dated as of September 1, 2011 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on September 15, 2011, File No. 1-3382).				X				
4.4.75	Seventy-ninth Supplemental Indenture, dated as of May 1, 2012 (incorporated by reference to Exhibit 4 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on May 18, 2012, File No. 1-3382).				X				
4.4.76	Eightieth Supplemental Indenture, dated as of March 1, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Current Report on Form 8-K filed on March 12, 2013, File No. 1-3382).				X				
4.4.77	Eighty-second Supplemental Indenture, dated as of March 1, 2014, between Duke Energy Progress, Inc. and The Bank of New York Mellon (formerly Irving Trust Company) and Tina D. Gonzalez (successor to Frederick G. Herbst) and forms of global notes (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s Current Report on Form 8-K filed on March 6, 2014, File No. 1-3382).				X				
4.4.78	Eighty-third Supplemental Indenture, dated as of November 1, 2014, between Duke Energy Progress, Inc. and The Bank of New York Mellon (formerly Irving Trust Company) and Tina D. Gonzalez (successor to Frederick G. Herbst) and forms of global notes (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, Inc.'s Current Report on Form 8-K filed on November 20, 2014, File No. 1-3382).				X				
4.4.79	Eighty-fifth Supplemental Indenture, dated as of August 1, 2015 (incorporated by reference to Exhibit 4.1 to Duke Energy Progress, LLC's Current Report on Form 8-K filed on August 13, 2015, File No. 1-3382).				X				
4.4.80	Eighty-sixth Supplemental Indenture, dated as of September 1, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 16, 2016, File No. 1-15929).				X				
4.4.81	Eighty-seventh Supplemental Indenture, dated as of September 1, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 8, 2017, File No. 1-3382).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.4.82	Eighty-ninth Supplemental Indenture (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 7, 2019, File no. 1-3382).				X				
4.4.83	Ninetieth Supplemental Indenture, dated as of August 1, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 20, 2020, File No. 1-3382).				X				
4.4.84	First Supplemental Indenture, dated as of August 1, 2020 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on August 20, 2020, File No. 1-3382).				X				
4.5	Indenture (for Debt Securities) between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and The Bank of New York Mellon (successor in interest to The Chase Manhattan Bank), as Trustee (incorporated by reference to Exhibit 4(a) to registrant's Current Report on Form 8-K filed on November 5, 1999, File No. 1-3382).				X				
4.6	Indenture (for [Subordinated] Debt Securities) (open ended) (incorporated by reference to Exhibit 4(a)(2) to Duke Energy Progress, Inc.'s (formerly Carolina Power & Light Company (d/b/a Progress Energy Carolinas, Inc.)) Registration Statement on Form S-3 filed on November 18, 2008, File No. 333-155418).				X				
4.7	Indenture (for First Mortgage Bonds) between Duke Energy Florida, Inc. (formerly Florida Power Corporation) and The Bank of New York Mellon (as successor to Guaranty Trust Company of New York and The Florida National Bank of Jacksonville), as Trustee, dated as of January 1, 1944, (incorporated by reference to Exhibit B-18 to registrant's Form A-2, File No. 2-5293).					X			
4.7.1	Seventh Supplemental Indenture (incorporated by reference to Exhibit 4(b) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).					X			
4.7.2	Eighth Supplemental Indenture (incorporated by reference to Exhibit 4(c) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).					X			
4.7.3	Sixteenth Supplemental Indenture (incorporated by reference to Exhibit 4(d) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 27, 1991, File No. 33-16788).					X			
4.7.4	Twenty-ninth Supplemental Indenture (incorporated by reference to Exhibit 4(c) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on September 17, 1982, File No. 2-79832).					X			
4.7.5	Thirty-eighth Supplemental Indenture, dated as of July 25, 1994 (incorporated by reference to exhibit 4(f) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation) Registration Statement on Form S-3 filed on August 29, 1994, File No. 33-55273).					X			
4.7.6	Forty-first Supplemental Indenture, dated as of February 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Duke Energy Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on February 21, 2003, File No. 1-3274).					X			
4.7.7	Forty-second Supplemental Indenture, dated as of April 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 11, 2003, File No. 1-3274).					X			
4.7.8	Forty-third Supplemental Indenture, dated as of November 1, 2003 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on November 21, 2003, File No. 1-3274).					X			

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.7.9	Forty-fourth Supplemental Indenture, dated as of August 1, 2004 (incorporated by reference to Exhibit 4(m) to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Annual Report on Form 10-K for the year ended December 31, 2004, filed on March 16, 2005, File No. 1-3274).					X			
4.7.10	Forty-sixth Supplemental Indenture, dated as of September 1, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on September 19, 2007, File No. 1-3274).					X			
4.7.11	Forty-seventh Supplemental Indenture, dated as of December 1, 2007 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on December 13, 2007, File No. 1-3274).					X			
4.7.12	Forty-eighth Supplemental Indenture, dated as of June 1, 2008 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on June 18, 2008, File No. 1-3274).					X			
4.7.13	Forty-ninth Supplemental Indenture, dated as of March 1, 2010 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on March 25, 2010, File No. 1-3274).					X			
4.7.14	Fiftieth Supplemental Indenture, dated as of August 11, 2011 (incorporated by reference to Exhibit 4 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on August 18, 2011, File No. 1-3274).					X			
4.7.15	Fifty-first Supplemental Indenture, dated as of November 1, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Florida, Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Current Report on Form 8-K filed on November 20, 2012, File No. 1-3274).					X			
4.7.16	Fifty-third Supplemental Indenture, dated as of September 1, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 9, 2016, File No. 1-03274).					X			
4.7.17	Fifty-fifth Supplemental Indenture, dated as of June 1, 2018 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 21, 2018, File No. 1-3274).					X			
4.7.18	Fifty-sixth Supplemental Indenture, dated as of November 1, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on November 26, 2019, File No. 1-3274).					X			
4.7.19	Fifty-seventh Supplemental Indenture, dated as of June 1, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on June 11, 2020, File No. 1-3274).					X			
4.8	Indenture (for Debt Securities) between Duke Energy Florida, Inc. (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) and The Bank of New York Mellon Trust Company, National Association (successor in interest to J.P. Morgan Trust Company, National Association), as Trustee, dated as of December 7, 2005 (incorporated by reference to Exhibit 4(a) to registrant's Current Report on Form 8-K filed on December 13, 2005, File No. 1-3274).					X			
4.8.1	First Supplemental Indenture, dated as of December 12, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 12, 2017, File No. 1-03274).					X			
4.8.2	Second Supplemental Indenture, dated as of November 26, 2019 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on November 26, 2019, File No. 1-3274).					X			

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.9	Indenture (for [Subordinated] Debt Securities) (open ended) (incorporated by reference to Exhibit 4(a)(2) Duke Energy Florida Inc.'s (formerly Florida Power Corporation (d/b/a Progress Energy Florida, Inc.)) Registration Statement on Form S-3 filed on November 18, 2008, File No. 333-155418).					X			
4.10	Original Indenture (Unsecured Debt Securities) between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of May 15, 1995 (incorporated by reference to Exhibit 3 to registrant's Form 8-A filed on July 27, 1995, File No. 1-1232).						X		
4.10.1	First Supplemental Indenture, dated as of June 1, 1995 (incorporated by reference to Exhibit 4 B to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended June 30, 1995, filed on August 11, 1995, File No. 1-1232).						X		
4.10.2	Seventh Supplemental Indenture, dated as of June 15, 2003 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Quarterly Report on Form 10-Q for the quarter ended June 30, 2003, filed on August 13, 2003, File No. 1-1232).						X		
4.11	Original Indenture (First Mortgage Bonds) between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of August 1, 1936 (incorporated by reference to an exhibit to registrant's Registration Statement No. 2-2374).						X		
4.11.1	Fortieth Supplemental Indenture, dated as of March 23, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Current Report on Form 8-K filed on March 24, 2009, File No. 1-1232).						X		
4.11.2	Forty-second Supplemental Indenture, dated as of September 6, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Ohio, Inc.'s (formerly The Cincinnati Gas & Electric Company) Current Report on Form 8-K filed on September 6, 2013, File No. 1-1232).						X		
4.11.3	Forty-fourth Supplemental Indenture, dated as of June 23, 2016 (incorporated by reference to Exhibit 4.1 registrant's Current Report on Form 8-K filed on June 23, 2016, File No. 1-1232).						X		
4.11.4	Forty-fifth Supplemental Indenture, dated as of March 27, 2017 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 27,2017, File No. 1-01232).						X		
4.11.5	Forty-sixth Supplemental Indenture, dated as of January 8, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on January 8, 2019, File No. 1-1232).						X		
4.11.6	Forty-seventh Supplemental Indenture, dated as of May 21, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 21, 2020, File No. 1-1232).						X		
4.12	Indenture between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and The Bank of New York Mellon Trust Company, N.A., as Successor Trustee, dated as of November 15, 1996 (incorporated by reference to Exhibit 4(v) to the Cinergy Corp. Form 10-K for the year ended December 31, 1996, filed on March 27, 1997, File No. 1-11377).							X	
4.12.1	Third Supplemental Indenture, dated as of March 15, 1998 (incorporated by reference to Exhibit 4-w to Cinergy Corp.'s Annual Report on Form 10-K for the year ended December 31, 1997, filed on March 27, 1998, File No. 1-11377).							X	
4.12.2	Eighth Supplemental Indenture, dated as of September 23, 2003 (incorporated by reference to Exhibit 4.2 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended September 30, 2003, filed on November 13, 2003, File No. 1-3543).							X	

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.12.3	Ninth Supplemental Indenture, dated as of October 21, 2005 (incorporated by reference to Exhibit 4.7.3 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633).							X	
4.12.4	Tenth Supplemental Indenture, dated as of June 9, 2006 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on June 15, 2006, File No. 1-3543).							X	
4.13	Original Indenture (First Mortgage Bonds) between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Deutsche Bank National Trust Company, as Successor Trustee, dated as of September 1, 1939, (filed as an exhibit in File No. 70-258).							X	
4.13.1	Tenth Supplemental Indenture, dated as of July 1, 1952, (filed as an exhibit in File No. 2-9687).							X	
4.13.2	Twenty-third Supplemental Indenture, dated as of January 1, 1977, (filed as an exhibit in File No. 2-57828).							X	
4.13.3	Twenty-fifth Supplemental Indenture, dated as of September 1, 1978, (filed as an exhibit in File No. 2-62543).							X	
4.13.4	Twenty-sixth Supplemental Indenture, dated as of September 1, 1978, (filed as an exhibit in File No. 2-62543).							X	
4.13.5	Thirtieth Supplemental Indenture, dated as of August 1, 1980, (filed as an exhibit in File No. 2-68562).							X	
4.13.6	Thirty-fifth Supplemental Indenture, dated as of March 30, 1984, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1984, File No. 1-3543).							X	
4.13.7	Forty-sixth Supplemental Indenture, dated as of June 1, 1990, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1991, File No. 1-3543).							X	
4.13.8	Forty-seventh Supplemental Indenture, dated as of July 15, 1991, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1991, File No. 1-3543).							X	
4.13.9	Forty-eighth Supplemental Indenture, dated as of July 15, 1992, (filed as an exhibit to registrant's Annual Report on Form 10-K for the year ended December 31, 1992, File No. 1-3543).							X	
4.13.10	Fifty-second Supplemental Indenture, dated as of April 30, 1999 (incorporated by reference to Exhibit 4 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended March 31, 1999, filed on May 13, 1999, File No. 1-3543).							X	
4.13.11	Fifty-seventh Supplemental Indenture, dated as of August 21, 2008 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report Form 8-K filed on August 21, 2008, File No. 1-3543).							X	
4.13.12	Fifty-eighth Supplemental Indenture, dated as of December 19, 2008 (incorporated by reference to Exhibit 4.8.12 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).							X	
4.13.13	Fifty-ninth Supplemental Indenture, dated as of March 23, 2009 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on March 24, 2009, File No. 1-3543).							X	
4.13.14	Sixtieth Supplemental Indenture, dated as of June 1, 2009 (incorporated by reference to Exhibit 4.8.14 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).							X	

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.13.15	Sixty-first Supplemental Indenture, dated as of October 1, 2009 (incorporated by reference to Exhibit 4.8.15 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).							X	
4.13.16	Sixty-second Supplemental Indenture, dated as of July 9, 2010 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on July 9, 2010, File No. 1-3543).							X	
4.13.17	Sixty-third Supplemental Indenture, dated as of September 23, 2010 (incorporated by reference to Exhibit 4.8.17 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 29, 2010, File No. 333-169633-02).							X	
4.13.18	Sixty-fourth Supplemental Indenture, dated as of December 1, 2011 (incorporated by reference to Exhibit 4(d)(2)(xviii) to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Registration Statement on Form S-3 filed on September 30, 2013, File No. 333-191462-03).							X	
4.13.19	Sixty-fifth Supplemental Indenture, dated as of March 15, 2012 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on March 15, 2012, File No. 1-3543).							X	
4.13.20	Sixty-sixth Supplemental Indenture, dated as of July 11, 2013 (incorporated by reference to Exhibit 4.1 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Current Report on Form 8-K filed on July 11, 2013, File No. 1-3543).							X	
4.13.21	Sixty-seventh Supplemental Indenture, dated as of January 1, 2016, between Duke Energy Indiana, Inc. and Deutsche Bank National Trust Company, as Trustee, supplementing and amending the Indenture of Mortgage or Deed of Trust, dated September 1, 1939, between Duke Energy Indiana, Inc. and Deutsche Bank National Trust Company, as Trustee (incorporated by reference to Exhibit 4.2 to Duke Energy Indiana, LLC's (formerly PSI Energy, Inc.) Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed on May 5, 2016, File No. 1-3543).							X	
4.13.22	Sixty-eighth Supplemental Indenture, dated as of May 12, 2016 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 12, 2016, File No. 1-3543).							X	
4.13.23	Sixty-ninth Supplemental Indenture, dated as of September 27, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 27, 2019, File No. 1-3543).							X	
4.13.24	Seventieth Supplemental Indenture, dated as of March 12, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 12, 2020, File No. 1-3543).							X	
4.14	Repayment Agreement between Duke Energy Ohio, Inc. (formerly The Cincinnati Gas & Electric Company) and The Dayton Power and Light Company, dated as of December 23, 1992, (filed with registrant's Annual Report on Form 10-K for the year ended December 31, 1992, File No. 1-1232).						X		
4.15	Unsecured Promissory Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and the Rural Utilities Service, dated as of October 14, 1998 (incorporated by reference to Exhibit 4 to registrant's Annual Report on Form 10-K for the year ended December 31, 1998, filed on March 8, 1999, File No. 1-3543).							X	
4.16	6.302% Subordinated Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Cinergy Corp., dated as of February 5, 2003 (incorporated by reference to Exhibit 4(yyy) to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, filed on May 12,2003, File No. 1-3543).							X	
4.17	6.403% Subordinated Note between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Cinergy Corp., dated as of February 5, 2003 (incorporated by reference to Exhibit 4(zzz) to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, filed on May 12, 2003, File No. 1-3543).							X	

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.18	Contingent Value Obligation Agreement between Progress Energy, Inc. (formerly CP&L Energy, Inc.) and The Chase Manhattan Bank, as Trustee, dated as of November 30, 2000 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on December 1, 2000, File No. 1-3382).			X					
4.19	Form of 3.47% Series A Senior Notes due July 16, 2027 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on March 29, 2012, File No. 1-06196).								X
4.20	Form of 3.57% Series B Senior Notes due July 16, 2027 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on March 29, 2012, File No. 1-06196).								X
4.21	Form of 4.65% Senior Notes due 2043 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on August 1, 2013, File No. 1-06196).								X
4.22	Form of 4.10% Senior Notes due 2034 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 18, 2014, File No. 1-06196).								X
4.23	Form of 3.60% Senior Notes due 2025 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on September 14, 2015, File No. 1-06196).								X
4.24	Form of 3.64% Senior Notes due 2046 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on July 28, 2016, File No. 1-06196).								X
4.25	Form of 4.24% Series B Senior Notes due June 6, 2021 (incorporated by reference to Exhibit 4.2 to registrant's Current Report on Form 8-K filed on May 12, 2011, File No. 1-06196).								X
4.26	Indenture, dated as of April 1, 1993, between Piedmont and The Bank of New York Mellon Trust Company, N.A. (as successor to Citibank, N.A.), Trustee (incorporated by reference to Exhibit 4.1 to registrant's Registration Statement on Form S-3 filed on May 16, 1995, File No. 33-59369).								X
4.26.1	Second Supplemental Indenture, dated as of June 15, 2003, between Piedmont and Citibank, N.A., Trustee (incorporated by reference to Exhibit 4.3 to registrant's Registration Statement on Form S-3 filed on June 19, 2003, File No. 333-106268).								X
4.26.2	Fourth Supplemental Indenture, dated as of May 6, 2011, between Piedmont Natural Gas Company, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form S-3-ASR filed on July 7, 2011, File No. 333-175386).								X
4.26.3	Fifth Supplemental Indenture, dated August 1, 2013, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on August 1, 2013, File No. 1-06196).								X
4.26.4	Sixth Supplemental Indenture, dated September 18, 2014, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 18, 2014, File No. 1-06196).								X
4.26.5	Seventh Supplemental Indenture, dated September 14, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on September 14, 2015, File No. 1-06196).								X
4.26.6	Eighth Supplemental Indenture, dated July 28, 2016, between the Company and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on July 28, 2016, File No. 1-06196).								X

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
4.26.7	Ninth Supplemental Indenture, dated as of May 24, 2019 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 24, 2019, File No. 1-6196).								X
4.26.8	Tenth Supplemental Indenture, dated as of May 21, 2020 (incorporated by reference to Exhibit 4.1 to registrant's Current Report on Form 8-K filed on May 21, 2020, File No. 1-6196).								X
4.27	Medium-Term Note, Series A, dated as of October 6, 1993 (incorporated by reference to Exhibit 4.8 to registrant's Annual Report on Form 10-K for the year ended October 31, 1993, File No. 1-06196).								X
4.28	Medium-Term Note, Series A, dated as of September 19, 1994 (incorporated by reference to Exhibit 4.9 to registrant's Annual Report on Form 10-K for the year ended October 31, 1994, File No. 1-06196).								X
4.29	Form of 6% Medium-Term Note, Series E, dated as of December 19, 2003 (incorporated by reference to Exhibit 99.2 to registrant's Current Report on Form 8-K filed on December 23, 2003, File No. 1-06196).								X
4.30	Form of Master Global Note (incorporated by reference to Exhibit 4.4 to registrant's Registration Statement on Form S-3 filed on April 30, 1997, File No. 333-26161).								X
4.31	Pricing Supplement of Medium-Term Notes, Series B, dated October 3, 1995 (incorporated by reference to Exhibit 4.10 to registrant's Annual Report on Form 10-K for the year ended October 31, 1995, File No. 1-06196).								X
4.32	Pricing Supplement of Medium-Term Notes, Series B, dated October 4, 1996 (incorporated by reference to Exhibit 4.11 to registrant's Annual Report on Form 10-K for the year ended October 31, 1996, File No. 1-06196).								X
4.33	Pricing Supplement of Medium-Term Notes, Series C, dated September 15, 1999 (incorporated by reference to Rule 424(b)(3) Pricing Supplement to Form S-3 Registration Statement Nos. 33-59369 and 333-26161).								X
4.34	Agreement of Resignation, Appointment and Acceptance dated as of March 29, 2007, by and among Piedmont Natural Gas Company, Inc., Citibank, N.A., and The Bank of New York Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2007, filed on June 8, 2007, File No. 1-06196).								X
10.1	Agreements with Piedmont Electric Membership Corporation, Rutherford Electric Membership Corporation and Blue Ridge Electric Membership Corporation (incorporated by reference to Exhibit 10.15 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-32853).		X						
10.2	Asset Purchase Agreement between Saluda River Electric Cooperative, Inc., as Seller, and Duke Energy Carolinas, LLC, as Purchaser, dated as of December 20, 2006 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on December 27, 2006, File No. 1-4928).		X						
10.3	Settlement between Duke Energy Corporation, Duke Energy Carolinas, LLC and the U.S. Department of Justice resolving Duke Energy's used nuclear fuel litigation against the U.S. Department of Energy, dated as of March 6, 2007 (incorporated by reference to Item 8.01 to registrant's Current Report on Form 8-K filed on March 12, 2007, File No. 1-4928).		X						
10.4	Letter Agreement between Georgia Natural Gas Company and Piedmont Energy Company dated February 12, 2016 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on February 18, 2016, File No. 1-06196).								X
10.5	Assignment of Membership Interests dated as of October 3, 2016 between Piedmont ACP Company, LLC and Dominion Atlantic Coast Pipeline, LLC, (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on October 7, 2016, File No. 1-06196).								X

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.6	Agreements between Piedmont Electric Membership Corporation, Rutherford Electric Membership Corporation and Blue Ridge Electric Membership Corporation (incorporated by reference to Exhibit 10.15 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed on August 9, 2006, File No. 1-32853).		X						
10.7	Conveyance and Assignment Agreement, dated as of October 3, 2016, by and between Piedmont Energy Company and Georgia Natural Gas Company (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on October 3, 2016, File No. 1-06196).								X
10.8	Engineering, Procurement and Construction Management Agreement between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Bechtel Power Corporation, dated as of December 15, 2008 (incorporated by reference to Exhibit 10.16 to registrant's Annual Report on Form 10-K for the year ended December 31, 2008, filed on March 13, 2009, File No. 1-3543). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)							X	
10.9	Formation and Sale Agreement between Duke Ventures, LLC, Crescent Resources, LLC, Morgan Stanley Real Estate Fund V U.S. L.P., Morgan Stanley Real Estate Fund V Special U.S., L.P., Morgan Stanley Real Estate Investors V U.S., L.P., MSP Real Estate Fund V, L.P., and Morgan Stanley Strategic Investments, Inc., dated as of September 7, 2006 (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed on November 9, 2006, File No. 1-32853).	X							
10.10	Operating Agreement of Pioneer Transmission, LLC (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, filed on November 7, 2008, File No. 1-32853).	X							
10.11**	Amended and Restated Duke Energy Corporation Directors' Saving Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.32 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32853).	X							
10.12	Engineering, Procurement and Construction Management Agreement between Duke Energy Indiana, LLC (formerly PSI Energy, Inc.) and Bechtel Power Corporation, dated as of December 15, 2008 (incorporated by reference to Item 1.01 to registrant's Current Report on Form 8-K filed on December 19, 2008, File Nos. 1-32853 and 1-3543). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)	X						X	
10.13**	Duke Energy Corporation Executive Severance Plan (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on January 13, 2011, File No. 1-32853).	X							
10.14	$6,000,000,000 Five-Year Credit Agreement between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Carolina Power and Light Company d/b/a Duke Energy Progress, Inc. and Florida Power Corporation, d/b/a Duke Energy Florida, Inc., as Borrowers, the lenders listed therein, Wells Fargo Bank, National Association, as Administrative Agent, Bank of America, N.A. and The Royal Bank of Scotland plc, as Co-Syndication Agents and Bank of China, New York Branch, Barclays Bank PLC, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Industrial and Commercial Bank of China Limited, New York Branch, JPMorgan Chase Bank, N.A. and UBS Securities LLC, as Co-Documentation Agents, dated as of November 18, 2011 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on November 25, 2011, File Nos. 1-32853, 1-4928, 1-1232 and 1-3543).	X	X				X	X	

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.14.1	Amendment No. 1 and Consent between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, Inc., Duke Energy Florida, Inc., and Wells Fargo Bank, National Association, dated as of December 18, 2013 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on December 23, 2013, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232 and 1-3543).	X	X		X	X	X	X	
10.14.2	Amendment No. 2 and Consent between Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, Inc., and Duke Energy Florida, Inc., the Lenders party hereto, the issuing Lenders party hereto, Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender, dated as of January 30, 2015 (incorporated by reference to Exhibit 10.1 of registrant's Current Report on Form 8-K filed on February 5, 2015, File Nos. 1-32853, 1-4928, 1-1232, 1-3543, 1-3382 and 1-3274).	X	X		X	X	X	X	
10.14.3	Amendment No. 3 and Consent, dated as of March 16, 2017, among the registrants, the Lenders party thereto, the issuing Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 17, 2017, File Nos. 1-32853, 1-04928, 1-03382, 1-03274, 1-01232, 1-03543, 1-06196).	X	X		X	X	X	X	X
10.14.4	Amendment No. 4 and Consent, dated as of March 18, 2019, among Duke Energy Corporation, Duke Energy Carolinas, LLC, Duke Energy Ohio, Inc., Duke Energy Indiana, LLC, Duke Energy Kentucky, Inc., Duke Energy Progress, LLC, Duke Energy Florida, LLC, and Piedmont Natural Gas Company, Inc., the Lenders party thereto, the Issuing Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 21, 2019, File Nos. 1-32853. 1-4928, 1-3382, 1-3274, 1-1232, 1-3543, 1-6196).	X	X		X	X	X	X	X
10.14.5	Amendment No. 5 and Consent, dated as of March 16, 2020, among registrants', the Lenders party thereto, the Issuing Lenders party thereto, and Wells Fargo Bank, N.A., as Administrative Agent, and Swingline Lender (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on March 17, 2020, File Nos. 1-32853, 1-4928, 1-3382, 1-3274, 1-1232, 1-3543, 1-6196).	X	X		X	X	X	X	X
10.15**	Duke Energy Corporation 2010 Long-Term Incentive Plan (incorporated by reference to Appendix A to registrant's Form DEF 14A filed on March 22, 2010, File No. 1-32853).	X							
10.15.1**	Amendment to Duke Energy Corporation 2010 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed on August 8, 2012, File No. 1-32853).	X							
10.16**	Duke Energy Corporation 2015 Long-Term Incentive Plan (incorporated by reference to Appendix C to registrant's DEF 14A filed on March 26, 2015, File No. 1-32853).	X							
10.16.1**	Amendment to Duke Energy Corporation 2015 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.16.1 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2018, filed on February 28, 2019, File No. 1-32853).	X							
10.17**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.4 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 filed on May 9, 2017, File No. 1-32853).	X							
10.18**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.24 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 21, 2018, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.19**	Performance-Based Retention Award Agreement (incorporated by reference to Exhibit 10.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 9, 2017, File No. 1-32853).	X							
10.20**	Performance Award Agreement (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 9, 2017, File No. 1-32853).	X							
10.21**	Performance Award Agreement (incorporated by reference to Exhibit 10.27 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 21, 2018, File No. 1-32853).	X							
10.22**	Performance Share Award Agreement (incorporated by reference to Exhibit 10.2 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 9, 2019, File No. 1-32853).	X							
10.23**	Performance Award Agreement (incorporated by reference to Exhibit 10.4 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 12, 2020, File No. 1-32853).	X							
10.24**	Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 9, 2019, File No. 1-32853).	X							
10.25	Settlement Agreement between Duke Energy Corporation, the North Carolina Utilities Commission Staff and the North Carolina Public Staff, dated as of November 28, 2012 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on November 29, 2012, File No. 1-32853).	X							
10.26	Settlement Agreement between Duke Energy Corporation and the North Carolina Attorney General, dated as of December 3, 2012 (incorporated by reference Item 7.01 to registrant's Current Report on Form 8-K filed on December 3, 2012, File No. 1-32853).	X							
10.27	Settlement Agreement between Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and The North Carolina Department of Environmental Quality, dated as of December 31, 2019 (incorporated by reference to Exhibit 10.1 to registrants' Current Report on Form 8-K filed on January 2, 2020, File Nos. 1-4928, 1-3382).		X		X				
10.28	Duke Energy Carolinas Summary of Partial Settlement in North Carolina Rate Case (incorporated by reference to Exhibit 99.1 to registrant's Current Report on Form 8-K filed on March 26, 2020, File Nos. 1-32853, 1-4928, 1-3382).	X	X		X				
10.29**	Form of Change-in-Control Agreement (incorporated by reference to Exhibit 10.58 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2012, filed on March 1, 2013, File No. 1-32853).	X							
10.30**	Amended and Restated Duke Energy Corporation Executive Cash Balance Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.52 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32852).	X							
10.30.1**	Amended and Restated Duke Energy Corporation Executive Cash Balance Plan, dated as of September 30, 2020 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on September 25, 2020, File No. 1-32853).	X							
10.31	Purchase, Construction and Ownership Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency, amending letter, dated as of February 18, 1982, and amendment, dated as of February 24, 1982 (incorporated by reference to Exhibit 10(a) to registrant's File No. 33-25560).				X				

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.32	Operating and Fuel Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency, amending letters, dated as of August 21, 1981, and December 15, 1981, and amendment, dated as of February 24, 1982 (incorporated by reference to Exhibit 10(b) to registrant's File No. 33-25560).				X				
10.33	Power Coordination Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Municipal Power Agency Number 3 and Exhibits, together with resolution, dated as of December 16, 1981, changing name to North Carolina Eastern Municipal Power Agency and amending letter, dated as of January 29, 1982 (incorporated by reference to Exhibit 10(c) to registrant's File No. 33-25560).				X				
10.34	Amendment, dated as of December 16, 1982, to Purchase, Construction and Ownership Agreement, dated as of July 30, 1981, between Duke Energy Progress, Inc. (formerly Carolina Power & Light Company) and North Carolina Eastern Municipal Power Agency (incorporated by reference to Exhibit 10(d) to registrant's File No. 33-25560).				X				
10.35**	Progress Energy, Inc. 2007 Equity Incentive Plan (incorporated by reference to Exhibit C to registrant's Form DEF 14A filed on March 30, 2007, File No. 1-15929).			X					
10.36	Precedent and Related Agreements between Duke Energy Florida, Inc. (formerly Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF")), Southern Natural Gas Company, Florida Gas Transmission Company ("FGT"), and BG LNG Services, LLC ("BG"), including: a) Precedent Agreement between Southern Natural Gas Company and PEF, dated as of December 2, 2004; b) Gas Sale and Purchase Contract between BG and PEF, dated as of December 1, 2004; c) Interim Firm Transportation Service Agreement by and between FGT and PEF, dated as of December 2, 2004; d) Letter Agreement between FGT and PEF, dated as of December 2, 2004, and Firm Transportation Service Agreement between FGT and PEF to be entered into upon satisfaction of certain conditions precedent; e) Discount Agreement between FGT and PEF, dated as of December 2, 2004; f) Amendment to Gas Sale and Purchase Contract between BG and PEF, dated as of January 28, 2005; and g) Letter Agreement between FGT and PEF, dated as of January 31, 2005 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K/A filed on March 15, 2005, File Nos. 1-15929 and 1-3274). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)			X		X			
10.37	Engineering, Procurement and Construction Agreement between Duke Energy Florida, Inc. (formerly Florida Power Corporation d/b/a/ Progress Energy Florida, Inc.), as owner, and a consortium consisting of Westinghouse Electric Company LLC and Stone & Webster, Inc., as contractor, for a two-unit AP1000 Nuclear Power Plant, dated as of December 31, 2008 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on March 2, 2009, File Nos. 1-15929 and 1-3274). (Portions of the exhibit have been omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.)			X		X			
10.38**	Employment Agreement between Duke Energy Corporation and Lynn J. Good, dated as of June 17, 2013 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 18, 2013, File No. 1-32853).	X							
10.38.1**	Amendment to Employment Agreement between Duke Energy Corporation and Lynn J. Good, dated as of June 25, 2015 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on June 29, 2015, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.39**	Duke Energy Corporation Executive Short-Term Incentive Plan, dated as of February 25, 2013 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on May 7, 2013, File No. 1-32853).	X							
10.40**	Duke Energy Corporation 2017 Director Compensation Program Summary (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 filed on August 3, 2017, File No. 1-32853).	X							
10.41**	Amended and Restated Duke Energy Corporation Executive Savings Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.82 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2013, filed on February 28, 2014, File No. 1-32853).	X							
10.41.1**	Amendment to Duke Energy Corporation Executive Savings Plan, dated as of January 1, 2014 (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed on November 3, 2017, File No. 1-32853).	X							
10.41.2**	Amendment to Duke Energy Corporation Executive Savings Plan, dated as of October 1, 2020 (incorporated by reference to Exhibit 10.2 to Duke Energy Corporation's Current Report on Form 8-K filed on September 25, 2020, File No. 1-32853).	X							
10.42	Agreement between Duke Energy SAM, LLC, Duke Energy Ohio, Inc., Duke Energy Commercial Enterprise, Inc. and Dynegy Resource I, LLC, dated as of August 21, 2014 (incorporated by reference to Exhibit 10.61 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2014, filed on March 2, 2015, File No. 1-32853).	X					X		
10.43	Asset Purchase Agreement between Duke Energy Progress, Inc. and North Carolina Eastern Municipal Power Agency, dated as of September 5, 2014 (incorporated by reference to Exhibit 10.62 to Duke Energy Corporation's Annual Report on Form 10-K for the year ended December 31, 2014, filed on March 2, 2015, File No. 1-32853).	X			X				
10.44	Accelerated Stock Repurchase Program executed by Goldman, Sachs & Co., and JPMorgan Chase Bank, N.A. on April 6, 2015, under an agreement with Duke Energy Corporation (incorporated by reference to Exhibit 10.1 to Duke Energy Corporation's Current Report on Form 8-K filed on April 6, 2015, File No. 1-32853).	X							
10.45	Plea Agreement between Duke Energy Corporation and the Court of the Eastern District of North Carolina in connection with the May 14, 2015, Dan River Grand Jury Settlement (incorporated by reference to Exhibit 10.3 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed on August 7, 2015, File No. 1-32853).	X							
10.46	Plea Agreement between Duke Energy Corporation and the Court of the Eastern District of North Carolina in connection with the May 14, 2015, Dan River Grand Jury Settlement (incorporated by reference to Exhibit 10.4 to Duke Energy Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, filed on August 7, 2015, File No. 1-32853).	X							
10.47	Purchase and Sale Agreement by and among Duke Energy International Group S.à.r.l., Duke Energy International Brazil Holdings S.à.r.l. and China Three Gorges (Luxembourg) Energy S.à.r.l., dated as of October 10, 2016 (incorporated by reference to Exhibit 2.1 to registrant's Current Report on Form 8-K filed on October 13, 2016, File No. 1-32853).	X							
10.48	Purchase and Sale Agreement by and among Duke Energy Brazil Holdings II, C.V., Duke Energy International Uruguay Investments SRL, Duke Energy International Group S.à.r.l., Duke Energy International España Holdings SL, Duke Energy International Investments No. 2 Ltd., ISQ Enerlam Aggregator, L.P., and Enerlam (UK) Holdings Ltd., dated as of October 10, 2016 (incorporated by reference to Exhibit 2.2. to registrant's Current Report on Form 8-K filed on October 13, 2016, File No. 1-32853).	X							

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Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.49**	Amended and Restated Employment Agreement, dated May 25, 2012, between Piedmont Natural Gas Company, Inc. and Franklin H. Yoho (incorporated by reference to Exhibits 10.1 and 10.2 to Piedmont Natural Gas Company, Inc.'s Quarterly Report on Form 10-Q for the quarter ended July 31, 2012, filed on September 7, 2012, File No. 1-06196).	X							
10.50**	Severance Agreements with Thomas E. Skains and Franklin H. Yoho, dated September 4, 2007 (incorporated by reference to Exhibits 10.2 and 10.2a to Piedmont Natural Gas Company, Inc's Quarterly Report on Form 10-Q for the quarter ended July 31, 2007, filed on September 7, 2007, File No. 1-06196).	X							
10.51**	Piedmont Natural Gas Company, Inc. Incentive Compensation Plan (incorporated by reference to Exhibit 10.64 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017, File No. 1-32853).	X							
10.51.1**	First Amendment to Piedmont Natural Gas Company, Inc. Incentive Compensation Plan (incorporated by reference to Exhibit 4.2 to registrant's Registration Statement on Form S-8 filed on October 3, 2016, File No. 1-32853).	X							
10.52**	Waiver of Certain Rights to Terminate for Good Reason between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.66 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017, File No. 1-32853).	X							
10.53**	Notice of Non-Renewal of Employment Agreement between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.67 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017, File No. 1-32853).	X							
10.54**	Retention Award Agreement, dated as of October 24, 2015, between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.68 to registrant's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 24, 2017, File No. 1-32853).	X							
10.55**	Consulting Agreement, dated as of October 4, 2019, between Duke Energy Corporation and Franklin H. Yoho (incorporated by reference to Exhibit 10.54 to registrant's Annual Report of Form 10-K for the year ended December 31, 2019, filed on February 20, 2020, File No. 1-32853).	X							
10.56	$1,000,000,000 Credit Agreement, dated as of June 14, 2017, among Duke Energy Corporation, the lenders listed therein, The Bank of Nova Scotia, as Administrative Agent, PNC Bank, National Association, Sumitomo Mitsui Banking Corporation and TD Bank, N.A., as CO-Syndication Agents, and Bank of China, New York Branch, BNP Paribas, Santander Bank, N.A. and U.S. Bank National Association, as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on June 14, 2017, File No. 1-32853).	X							
10.57	$1,000,000,000 Credit Agreement, dated as of May 15, 2019, among Duke Energy Corporation, the Lenders party thereto, The Bank of Nova Scotia, as Administrative Agent, PNC Bank, National Association, Sumitomo Mitsui Banking Corporation and TD Bank, N.A., as Co-Syndication Agents, and Bank of China, New York Branch, BNP Paribas, Santander Bank, N.A., and U.S. Bank, National Association, as Co-Documentation Agents (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on May 16, 2019, File No. 1-32853).	X							
10.58	$1.5 billion 364-Day Term Loan Credit Agreement, dated as of March 19, 2020, among the registrant, as Borrower, certain Lenders from time to time parties thereto, and PNC Bank, N.A., as Administrative Agent, and registrant's borrowing of the remaining $500 million under registrant's existing $1 billion revolving credit facility on March 17, 2020 (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on March 19, 2020, File No. 1-32853).	X							

PART IV

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.58.1	Joinder Agreement, dated as of March 27, 2020, by and among, the registrant, each of the Incremental Lenders listed therein, and PNC Bank, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 12, 2020, File No. 1-32853).	X							
10.59	Note Purchase Agreement, dated as of May 6, 2011, among Piedmont Natural Gas Company, Inc. and the Purchasers party thereto (incorporated by reference to Exhibit 10 to registrant's Current Report on Form 8-K filed on May 12, 2011, File No. 1-06196).								X
10.60	Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC dated April 9, 2012, by and among Williams Partners Operating LLC and Cabot Pipeline Holdings LLC (incorporated by reference to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended January 31, 2013, filed on March 6, 2013, File No. 1-06196).								X
10.60.1	First Amendment to Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC, dated as of November 9, 2012, by and among Constitution Pipeline Company, LLC, Williams Partners Operating LLC, Cabot Pipeline Holdings LLC, and Piedmont Constitution Pipeline Company, LLC (incorporated by reference to Exhibit 10.2 to registrant's Quarterly Report on Form 10-Q for the quarter ended January 31, 2013, filed on March 6, 2013, File No. 1-06196).								X
10.60.2	Second Amendment to Amended and Restated Limited Liability Company Agreement of Constitution Pipeline Company, LLC, dated as of May 29, 2013, by and among Constitution Pipeline Company, LLC, Williams Partners Operating LLC, Cabot Pipeline Holdings LLC, Piedmont Constitution Pipeline Company, LLC, and Capitol Energy Ventures Corp. (incorporated by reference to Exhibit 99.1 to registrant's Current Report on Form 8-K filed on September 4, 2013, File No. 1-06196).								X
10.61	Second Amended and Restated Limited Liability Company Agreement of SouthStar Energy Services LLC, dated as of September 1, 2013, by and between Georgia Natural Gas Company and Piedmont Energy Company (incorporated by reference to Exhibit 10.39 to registrant's Annual Report on Form 10-K for the year ended October 31, 2013, filed on December 23, 2013, File No. 1-06196).								X
10.62	Limited Liability Company Agreement of Atlantic Coast Pipeline, LLC, dated as of September 2, 2014, by and between Dominion Atlantic Coast Pipeline, LLC, Duke Energy ACP, LLC, Piedmont ACP Company, LLC, and Maple Enterprise Holdings, Inc. (incorporated by reference to Exhibit 10.35 to registrant's Annual Report on Form 10-K for the year ended October 31, 2014, filed on December 23, 2014, File No. 1-06196).								X
10.63	Engineering, Procurement and Construction Agreement between Duke Energy Business Services, LLC, as agent for and on behalf of Piedmont Natural Gas Company Inc. and Matrix Service, Inc., dated as of April 30, 2019 (incorporated by reference to Exhibit 10.1 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 6, 2019, File No. 1-06196). (Portions of the exhibit have been omitted for confidentiality.)								X
10.64	Decommissioning Services Agreement between Duke Energy Florida, LLC, and ADP CR3, LLC, and ADP SF1, LLC (incorporated by reference to Exhibit 10.3 to registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 6, 2019, File No. 2-5293). (Portions of the exhibit have been omitted for confidentiality.)					X			
10.65	Form of Forward Sale Agreement (incorporated by reference to Exhibit 10.1 to registrant's Current Report on Form 8-K filed on November 8, 2019, File No. 1-32853).	X							

PART IV

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
10.66	Lease Agreement dated as of December 23, 2019, between the registrant and CGA 525 South Tryon TIC 1, LLC, a Delaware limited liability company, CGA 525 South Tryon TIC 2, LLC, a Delaware limited liability company, and CK 525 South Tryon TIC, LLC, a Delaware limited liability company (incorporated by reference to Exhibit 10.64 to registrant's Annual Report on Form 10-K for the year ended December 31, 2019, filed on February 20, 2020, File No. 1-4928).		X						
10.67	Construction Agency Agreement dated as of December 23, 2019, between the registrant and CGA 525 South Tryon TIC 1, LLC, a Delaware limited liability company, CGA 525 South Tryon TIC 2, LLC, a Delaware limited liability company, and CK 525 South Tryon TIC, LLC, a Delaware limited liability company (incorporated by reference to Exhibit 10.65 to registrant's Annual Report on Form 10-K for the year ended December 31, 2019, filed on February 20, 2020, File No. 1-4928).		X						
*21	List of Subsidiaries	X							
*23.1.1	Consent of Independent Registered Public Accounting Firm.	X							
*23.1.2	Consent of Independent Registered Public Accounting Firm.		X						
*23.1.3	Consent of Independent Registered Public Accounting Firm.				X				
*23.1.4	Consent of Independent Registered Public Accounting Firm.					X			
*23.1.5	Consent of Independent Registered Public Accounting Firm.						X		
*23.1.6	Consent of Independent Registered Public Accounting Firm.							X	
*23.1.7	Consent of Independent Registered Public Accounting Firm.								X
*24.1	Power of attorney authorizing Lynn J. Good and others to sign the Annual Report on behalf of the registrant and certain of its directors and officers.	X							
*24.2	Certified copy of resolution of the Board of Directors of the registrant authorizing power of attorney.	X							
*31.1.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X							
*31.1.2	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X						
*31.1.3	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			X					
*31.1.4	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X				
*31.1.5	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X			
*31.1.6	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.						X		
*31.1.7	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.							X	
*31.1.8	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.								X
*31.2.1	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X							
*31.2.2	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.		X						

PART IV

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
*31.2.3	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			X					
*31.2.4	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X				
*31.2.5	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X			
*31.2.6	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.						X		
*31.2.7	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.							X	
*31.2.8	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.								X
*32.1.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X							
*32.1.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X						
*32.1.3	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X					
*32.1.4	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X				
*32.1.5	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X			
*32.1.6	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.						X		
*32.1.7	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.							X	
*32.1.8	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.								X
*32.2.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X							
*32.2.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.		X						
*32.2.3	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X					
*32.2.4	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X				
*32.2.5	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X			
*32.2.6	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.						X		
*32.2.7	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.							X	
*32.2.8	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.								X
*101.INS	XBRL Instance Document (this does not appear in the Interactive Data File because it's XBRL tags are embedded within the Inline XBRL document).	X	X	X	X	X	X	X	X
*101.SCH	XBRL Taxonomy Extension Schema Document	X	X	X	X	X	X	X	X

PART IV

Exhibit Number		Duke Energy	Duke Energy Carolinas	Progress Energy	Duke Energy Progress	Duke Energy Florida	Duke Energy Ohio	Duke Energy Indiana	Piedmont
*101.CAL	XBRL Taxonomy Calculation Linkbase Document	X	X	X	X	X	X	X	X
*101.LAB	XBRL Taxonomy Label Linkbase Document	X	X	X	X	X	X	X	X
*101.PRE	XBRL Taxonomy Presentation Linkbase Document	X	X	X	X	X	X	X	X
*101.DEF	XBRL Taxonomy Definition Linkbase Document	X	X	X	X	X	X	X	X
*104	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).	X	X	X	X	X	X	X	X

The total amount of securities of each respective registrant or its subsidiaries authorized under any instrument with respect to long-term debt not filed as an exhibit does not exceed 10% of the total assets of such registrant and its subsidiaries on a consolidated basis. Each registrant agrees, upon request of the SEC, to furnish copies of any or all of such instruments to it.

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY CORPORATION
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chair, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chair, President and Chief Executive Officer (Principal Executive Officer and Director)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:

Michael G. Browning*	John T. Herron*
Annette K. Clayton*	William E. Kennard*
Theodore F. Craver, Jr.*	E. Marie McKee*
Robert M. Davis*	Marya M. Rose*
Daniel R. DiMicco*	Thomas E. Skains*
Nicholas C. Fanandakis*	William E. Webster, Jr.*
Lynn J. Good*	

Steven K. Young, by signing his name hereto, does hereby sign this document on behalf of the registrant and on behalf of each of the above-named persons previously indicated by asterisk (*) pursuant to a power of attorney duly executed by the registrant and such persons, filed with the Securities and Exchange Commission as an exhibit hereto.

By: /s/ STEVEN K. YOUNG
Attorney-In-Fact

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY CAROLINAS, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

PROGRESS ENERGY, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:
/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ LYNN J. GOOD
Lynn J. Good

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY PROGRESS, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ DOUGLAS F ESAMANN
Douglas F Esamann

/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY FLORIDA, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ DOUGLAS F ESAMANN
Douglas F Esamann

/s/ KODWO GHARTEY-TAGOE
Kodwo Ghartey-Tagoe

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

/s/ JULIA S. JANSON
Julia S. Janson

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY OHIO, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:

/s/ DOUGLAS F ESAMANN
Douglas F Esamann

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

DUKE ENERGY INDIANA, LLC
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

(iv) Directors:
/s/ DOUGLAS F ESAMANN
Douglas F Esamann
/s/ KELLEY A. KARN
Kelley A. Karn
/s/ STAN PINEGAR
Stan Pinegar

Date: February 25, 2021

PART IV

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 25, 2021

PIEDMONT NATURAL GAS COMPANY, INC.
(Registrant)

By: /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

(i) /s/ LYNN J. GOOD
Lynn J. Good
Chief Executive Officer (Principal Executive Officer)

(ii) /s/ STEVEN K. YOUNG
Steven K. Young
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

(iii) /s/ DWIGHT L. JACOBS
Dwight L. Jacobs
Senior Vice President, Chief Accounting Officer, Tax and Controller (Principal Accounting Officer)

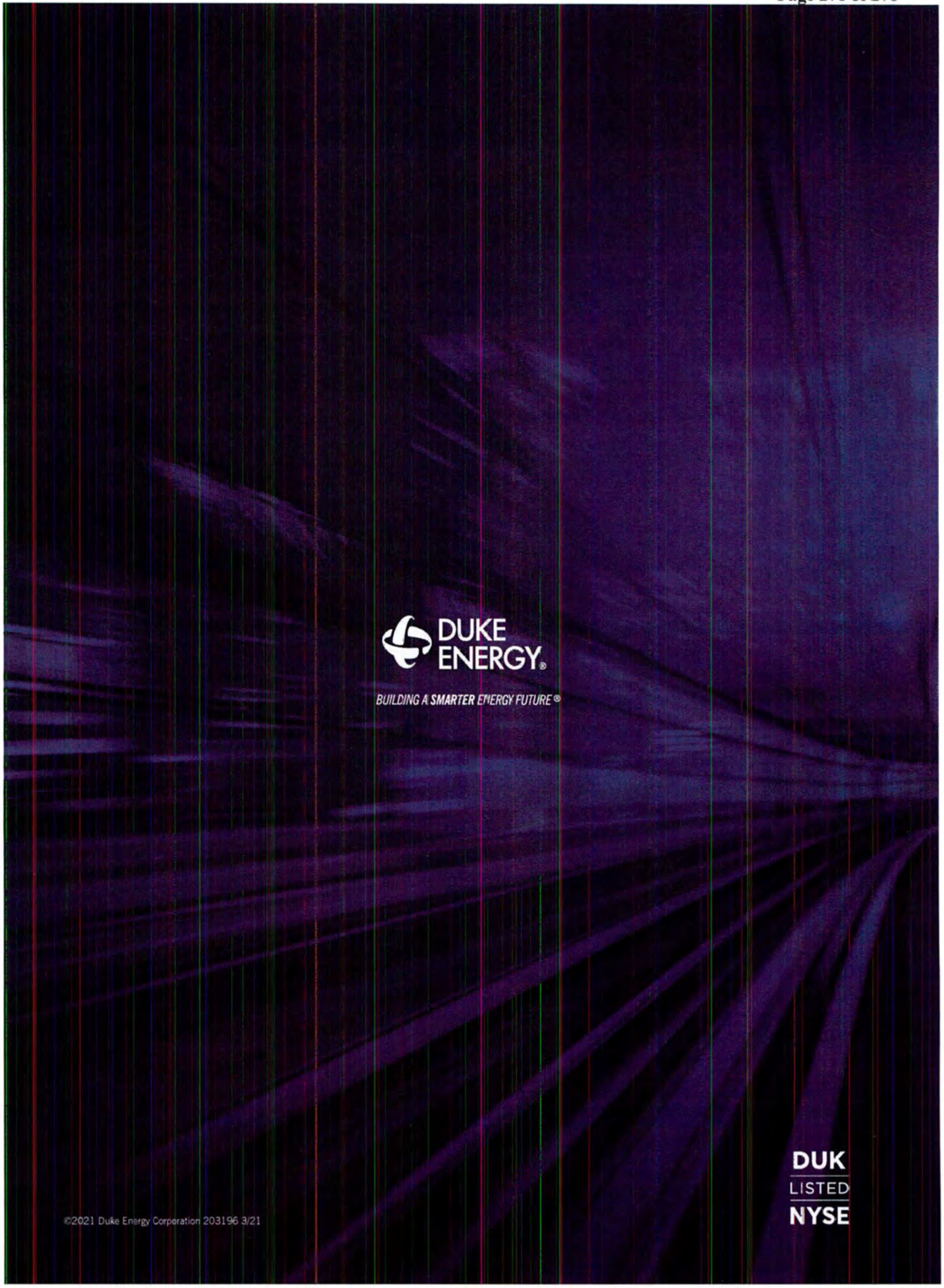
(iv) Directors:

/s/ DOUGLAS F ESAMANN
Douglas F Esamann

/s/ LYNN J. GOOD
Lynn J. Good

/s/ DHIAA M. JAMIL
Dhiaa M. Jamil

Date: February 25, 2021


DUKE
ENERGY®
BUILDING A SMARTER ENERGY FUTURE®
DUK
LISTED
NYSE

Duke Energy Kentucky, Inc.
Financial Statements
and Independent Auditors' Report

December 31, 2019

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DUKE ENERGY KENTUCKY, INC.

December 31, 2019

GLOSSARY OF TERMS

Glossary of Terms

The following terms or acronyms used in this document are defined below:

Term or Acronym	Definition
AFUDC	Allowance for Funds Used During Construction
ARO	Asset Retirement Obligation
CRC	Cinergy Receivables Company, LLC
Duke Energy	Duke Energy Corporation
Duke Energy Kentucky	Duke Energy Kentucky, Inc.
EPA	U.S. Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FTR	Financial transmission right
GAAP	Generally Accepted Accounting Principles in the U.S.
KPSC	Kentucky Public Service Commission
ROU assets	Right-of-use assets
Tax Act	Tax Cuts and Jobs Act
U.S.	United States

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholder of Duke Energy Kentucky, Inc.

We have audited the accompanying financial statements of Duke Energy Kentucky, Inc. (the "Company"), which comprise the balance sheets as of December 31, 2019 and 2018, and the related statements of operations, changes in equity, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Duke Energy Kentucky, Inc. as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
March 6, 2020

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF OPERATIONS

	Years Ended December 31,	
(in thousands)	**2019**	**2018**
Operating Revenues		
Electric	**$ 374,689**	$ 378,507
Natural gas	**103,936**	104,548
Total operating revenues	**478,625**	483,055
Operating Expenses		
Fuel used in electric generation and purchased power	**123,672**	140,465
Cost of natural gas	**37,963**	43,006
Operation, maintenance and other	**148,105**	144,520
Depreciation and amortization	**79,277**	64,893
Property and other taxes	**16,089**	15,094
Total operating expenses	**405,106**	407,978
Gains (Losses) on Sales of Assets and Other, net	**72**	(74)
Operating Income	**73,591**	75,003
Other Income and Expenses, net	**7,954**	6,627
Interest Expense	**23,430**	18,347
Income Before Income Taxes	**58,115**	63,283
Income Tax Expense	**9,245**	13,474
Net Income	**$ 48,870**	$ 49,809

See Notes to Financial Statements

DUKE ENERGY KENTUCKY, INC.
BALANCE SHEETS

	December 31,	
(in thousands, except share amounts)	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	$ 7,146	$ 7,773
Receivables (net of allowance for doubtful accounts of $314 at 2019 and $221 at 2018)	6,659	9,450
Receivables from affiliated companies	26,116	29,195
Inventory	50,653	40,596
Regulatory assets	14,300	10,562
Other	9,254	11,960
Total current assets	114,128	109,536
Property, Plant and Equipment		
Cost	2,739,794	2,517,897
Accumulated depreciation and amortization	(991,145)	(965,124)
Net property, plant and equipment	1,748,649	1,552,773
Other Noncurrent Assets		
Regulatory assets	110,995	113,652
Operating lease right-of-use assets, net	9,152	—
Other	11,489	9,922
Total other noncurrent assets	131,636	123,574
Total Assets	$ 1,994,413	$ 1,785,883
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 54,987	$ 45,759
Accounts payable to affiliated companies	12,534	17,503
Notes payable to affiliated companies	82,509	38,875
Taxes accrued	16,336	18,143
Interest accrued	7,146	6,115
Current maturities of long-term debt	—	100,396
Asset retirement obligations	1,428	6,448
Regulatory liabilities	16,112	14,294
Other	20,338	19,291
Total current liabilities	211,390	266,824
Long-Term Debt	633,807	424,714
Long-Term Debt Payable to Affiliated Companies	25,000	25,000
Other Noncurrent Liabilities		
Deferred income taxes	231,695	214,718
Asset retirement obligations	48,352	56,378
Regulatory liabilities	137,624	156,115
Operating lease liabilities	8,989	—
Accrued pension and other post-retirement benefit costs	28,360	21,734
Other	24,103	24,177
Total other noncurrent liabilities	479,123	473,122
Commitments and Contingencies		
Equity		
Common stock, $15.00 par value, 1,000,000 shares authorized and 585,333 shares outstanding	8,780	8,780
Additional paid-in capital	217,494	217,494
Retained earnings	418,819	369,949
Total equity	645,093	596,223
Total Liabilities and Equity	$ 1,994,413	$ 1,785,883

See Notes to Financial Statements

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF CASH FLOWS

(in thousands)	Years Ended December 31, 2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	$ 48,870	$ 49,809
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	79,871	65,489
Equity component of AFUDC	(2,505)	(3,144)
(Gains) Losses on sales of other assets	(72)	74
Deferred income taxes	11,613	30,812
Accrued pension and other post-retirement benefit costs	524	1,408
Contributions to qualified pension plans	(481)	(72)
Payments for asset retirement obligations	(7,728)	(3,233)
(Increase) decrease in:		
Receivables	4,639	(6,124)
Receivables from affiliated companies	3,078	(6,909)
Inventory	(10,057)	3,197
Other current assets	(4,124)	(3,759)
Increase (decrease) in:		
Accounts payable	(3,691)	(4,937)
Accounts payable to affiliated companies	(4,969)	1,729
Taxes accrued	(1,807)	541
Other current liabilities	2,661	2,771
Other assets	(1,684)	(5,872)
Other liabilities	(1,921)	2,591
Net cash provided by operating activities	112,217	124,371
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	(248,601)	(276,990)
Notes receivable from affiliated companies	—	14,671
Other	(16,621)	(28,451)
Net cash used in investing activities	(265,222)	(290,770)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	209,006	99,584
Payments for the redemption of long-term debt	(100,169)	(885)
Notes payable to affiliated companies	43,634	38,875
Capital contributions from parent	—	35,000
Other	(93)	(89)
Net cash provided by financing activities	152,378	172,485
Net (decrease) increase in cash and cash equivalents	(627)	6,086
Cash and cash equivalents at beginning of period	7,773	1,687
Cash and cash equivalents at end of period	$ 7,146	$ 7,773
Supplemental Disclosures:		
Cash paid for interest, net of amount capitalized	$ 21,805	$ 17,024
Cash paid for (received from) income taxes	273	(16,784)
Significant non-cash transactions:		
Accrued capital expenditures	43,879	32,142

See Notes to Financial Statements

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF CHANGES IN EQUITY

(in thousands)	Common Stock	Additional Paid-in Capital	Retained Earnings	Total Equity
Balance at December 31, 2017	$ 8,780	$ 182,494	$ 320,140	$ 511,414
Net income	—	—	49,809	49,809
Contribution from parent	—	35,000	—	35,000
Balance at December 31, 2018	$ 8,780	$ 217,494	$ 369,949	$ 596,223
Net income	—	—	**48,870**	**48,870**
Balance at December 31, 2019	**$ 8,780**	**$ 217,494**	**$ 418,819**	**$ 645,093**

See Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS AND BASIS OF PRESENTATION

Duke Energy Kentucky is a combination electric and natural gas regulated public utility company that provides service in northern Kentucky. Duke Energy Kentucky's principal lines of business include generation, transmission, distribution and sale of electricity, as well as the transportation and sale of natural gas. Duke Energy Kentucky is subject to the regulatory provisions of the KPSC and the FERC. Duke Energy Kentucky's common stock is wholly owned by Duke Energy Ohio, Inc., an indirect wholly owned subsidiary of Duke Energy.

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

Other Current Assets and Liabilities

The following table provides a description of amounts included in Other within Current Assets or Current Liabilities that exceed 5% of total Current Assets or Current Liabilities on the Duke Energy Kentucky Balance Sheets at either December 31, 2019, or 2018.

		December 31,	
(in thousands)	**Location**	**2019**	**2018**
Unrealized gains on mark-to-market and hedging transactions	Current Assets	**$ 2,758**	$ 5,685

SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

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

Regulatory Accounting

The majority of Duke Energy Kentucky's operations are subject to price regulation for the sale of electricity and natural gas by the KPSC or FERC. When prices are set on the basis of specific costs of the regulated operations and an effective franchise is in place such that sufficient natural gas or electric services can be sold to recover those costs, Duke Energy Kentucky applies regulatory accounting. Regulatory accounting changes the timing of the recognition of costs or revenues relative to a company that does not apply regulatory accounting. As a result, regulatory assets and regulatory liabilities are recognized on the Balance Sheets and are amortized consistent with the treatment of the related cost in the ratemaking process. See Note 2 for further information.

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

Cash and Cash Equivalents

All highly liquid investments with maturities of three months or less at the date of acquisition are considered cash equivalents.

Inventory

Inventory related to regulated operations is valued at historical cost. Inventory is charged to expense or capitalized to property, plant and equipment when issued, primarily using the average cost method. Excess or obsolete inventory is written-down to the lower of cost or net realizable value. Once inventory has been written-down, it creates a new cost basis for the inventory that is not subsequently written-up. Provisions for inventory write-offs were not material at December 31, 2019, and 2018. The components of inventory are presented in the table below.

	December 31,	
(in thousands)	**2019**	**2018**
Materials and supplies	**$ 19,017**	$ 19,608
Coal	**14,982**	14,356
Natural gas, oil and other	**16,654**	6,632
Total inventory	**$ 50,653**	$ 40,596

Long-Lived Asset Impairments

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

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

Property, Plant and Equipment

Property, plant and equipment are stated at the lower of depreciated historical cost net of any disallowances or fair value, if impaired. Duke Energy Kentucky capitalizes all construction-related direct labor and material costs, as well as indirect construction costs such as general engineering, taxes and financing costs. See "Allowance for Funds Used During Construction and Interest Capitalized" below for information on capitalized financing costs. Costs of renewals and betterments that extend the useful life of property, plant and equipment are also capitalized. The cost of repairs, replacements and major maintenance projects, which do not extend the useful life or increase the expected output of the asset, are expensed as incurred. Depreciation is generally computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update composite rates and are approved by the KPSC and/or the FERC when required. The composite weighted average depreciation rate was 2.6% and 2.5% for the years ended December 31, 2019, and 2018, respectively.

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

When Duke Energy Kentucky sells entire regulated operating units, the original cost and accumulated depreciation and amortization balances are removed from Property, Plant and Equipment on the Balance Sheets. Any gain or loss is recorded in earnings, unless otherwise required by the KPSC and/or the FERC. See Note 7 for further information.

Allowance for Funds Used During Construction and Interest Capitalized

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

AFUDC equity, a permanent difference for income taxes, reduces the effective tax rate when capitalized and increases the effective tax rate when depreciated or amortized. See Note 15 for additional information.

Asset Retirement Obligations

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

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

Obligations for closure of ash basins are based upon discounted cash flows of estimated costs for site-specific plans, if known, or probability weightings of the potential closure methods if the closure plans are under development and multiple closure options are being considered and evaluated on a site-by-site basis. See Note 6 for further information.

Revenue Recognition

Duke Energy Kentucky recognizes revenue as customers obtain control of promised goods and services in an amount that reflects consideration expected in exchange for those goods or services. Generally, the delivery of electricity and natural gas results in the transfer of control to customers at the time the commodity is delivered and the amount of revenue recognized is equal to the amount billed to each customer, including estimated volumes delivered when billings have not yet occurred. See Note 13 for further information.

Derivatives and Hedging

Derivative instruments may be used in connection with commodity price and interest rate activities, including swaps, futures, forwards and options. All derivative instruments, except those that qualify for the normal purchase/normal sale exception, are recorded on the Balance Sheets at fair value. For activity subject to regulatory accounting, gains and losses on derivative contracts are reflected as regulatory assets or regulatory liabilities and not as other comprehensive income or current period income. As a result, changes in fair value of these derivatives have no immediate earnings impact. See Note 10 for further information.

Unamortized Debt Premium, Discount and Expense

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

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

Loss Contingencies and Environmental Liabilities

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

Environmental liabilities are recorded on an undiscounted basis when environmental remediation or other liabilities become probable and can be reasonably estimated. Environmental expenditures related to past operations that do not generate current or future revenues are expensed. Environmental expenditures related to operations that generate current or future revenues are expensed or capitalized, as appropriate. Certain environmental expenditures receive regulatory accounting treatment and are recorded as regulatory assets. See Notes 2 and 3 for further information.

Pension and Other Post-Retirement Benefit Plans

Duke Energy maintains qualified, non-qualified and other post-retirement benefit plans. Eligible employees of Duke Energy Kentucky participate in the respective qualified, non-qualified and other post-retirement benefit plans and Duke Energy Kentucky is allocated its proportionate share of benefit costs. See Note 14 for further information, including significant accounting policies associated with these plans.

Income Taxes

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

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

Tax-related interest and penalties are recorded in Interest Expense and Other Income and Expenses, net, in the Statements of Operations. See Note 15 for further information.

Dividend Restrictions

Duke Energy Kentucky is required to pay dividends solely out of retained earnings and to maintain a minimum of 35% equity in its capital structure.

New Accounting Standards

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

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

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

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

Duke Energy Kentucky evaluated the financial statement impact of adopting the standard and monitored industry implementation issues. Under agreements considered leases, where Duke Energy Kentucky is the lessee, ROU assets and operating lease liabilities are now recognized on the balance sheet. Duke Energy Kentucky did not have a material change to the financial statements from the adoption of the new standard for contracts where it is the lessor. See Note 4 for further information.

There are no Accounting Standards Updates that have been issued but not yet adopted as of December 31, 2019, that are expected to have a material impact on the presentation or results of operations, cash flows or financial position of Duke Energy Kentucky.

2. REGULATORY MATTERS

REGULATORY ASSETS AND LIABILITIES

Duke Energy Kentucky records regulatory assets and liabilities that result from the ratemaking process. See Note 1 for further information.

The following table represents the regulatory assets and liabilities on the Balance Sheets.

(in thousands)	December 31, 2019	December 31, 2018	Earns/Pays a Return	Recovery/ Refund Period Ends
Regulatory Assets[(a)]				
East Bend deferrals	$ 43,834	$ 47,482	X	(c)
Accrued pension and other post-retirement benefits	36,398	31,764		(b)
AROs – coal ash	15,983	19,513	X	(c)(g)
Hedge costs and other deferrals	4,894	4,082		(e)
Storm cost deferrals	4,326	4,258		(c)
Advanced Metering Infrastructure	4,266	5,366		2033
East Bend outage normalization	3,854	2,066		(c)
Deferred gas integrity costs	2,711	2,887		2029
Carbon management research grant	1,667	1,733		2028
Deferred fuel and purchased gas costs	1,423	1,516		(d)(g)2020
Vacation accrual	1,354	1,414		2020
Deferred debt expense	689	922		2036
Other	3,896	1,211		(c)(d)
Total regulatory assets	125,295	124,214		
Less: current portion	14,300	10,562		
Total noncurrent regulatory assets	$ 110,995	$ 113,652		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes	$ 130,324	$ 136,972		(c)
Costs of removal	7,894	19,300		(f)
Accrued pension and other post-retirement benefits	5,329	5,206		(b)
Demand side management/Energy efficiency costs	4,317	3,129		(c)(d)
Deferred fuel and purchased gas costs	4,317	(144)		2020
Hedge costs and other deferrals	657	2,930		(e)
Profit sharing mechanism	—	619		2019
Other	898	2,397		(c)
Total regulatory liabilities	153,736	170,409		
Less: current portion	16,112	14,294		
Total noncurrent regulatory liabilities	$ 137,624	$ 156,115		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans, which is approximately thirteen years. See Note 14 for further information.
(c) The expected recovery or refund period varies or has not been determined.
(d) Deferred costs are recovered through a rider mechanism.
(e) Amounts relate to unrealized gains and losses on derivatives recorded as a regulatory asset or liability, respectively, until the contracts are settled.
(f) Represents funds received from customers to cover future removal of property, plant and equipment from retired or abandoned sites as property is retired. Included in rate base and recovered over the life of associated assets.
(g) Certain amounts are recovered through rates.

RATE RELATED INFORMATION

The KPSC approves rates for retail electric and natural gas services within the Commonwealth of Kentucky. The FERC approves rates for electric sales to wholesale customers served under cost-based rates, as well as sales of transmission service.

Duke Energy Kentucky Natural Gas Base Rate Case

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

Duke Energy Kentucky Electric Base Rate Case

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

Regional Transmission Organization Realignment

Duke Energy Kentucky transferred control of its transmission assets to effect a Regional Transmission Organization (RTO) realignment from Midcontinent Independent System Operator, Inc. (MISO) to PJM Interconnection, LLC (PJM), effective December 31, 2011.

On December 22, 2010, the KPSC approved Duke Energy Kentucky's request to effect the RTO realignment, subject to a commitment not to seek double-recovery in a future rate case of the transmission expansion fees that may be charged by MISO and PJM in the same period or overlapping periods. Duke Energy Kentucky is currently recovering PJM transmission expansion fees through current base rates.

Upon its exit from MISO on December 31, 2011, Duke Energy Kentucky recorded a liability and expense for its exit obligation and share of MISO Transmission Expansion Planning costs, excluding Multi Value Projects. This liability was recorded within Other in Current Liabilities and Other in Noncurrent Liabilities on the Balance Sheets.

The following table provides a reconciliation of the beginning and ending balance of recorded obligations related to the withdrawal from MISO.

(in thousands)	December 31, 2018	Provision / Adjustments	Cash Reductions	December 31, 2019
MISO withdrawal liability	$ 14,904	$ (135)	$ (845)	$ 13,924

3. COMMITMENTS AND CONTINGENCIES

GENERAL INSURANCE

Duke Energy Kentucky has insurance and/or reinsurance coverage either directly or through indemnification from Duke Energy's captive insurance company, Bison Insurance Company Limited, and its affiliates, consistent with companies engaged in similar commercial operations with similar type properties. Duke Energy Kentucky's coverage includes (i) commercial general liability coverage for liabilities arising to third parties for bodily injury and property damage; (ii) workers' compensation; (iii) automobile liability coverage; and (iv) property coverage for all real and personal property damage. Real and personal property damage coverage excludes electric transmission and distribution lines, but includes damages arising from boiler and machinery breakdowns, earthquakes, flood damage and extra expense, but not outage or replacement power coverage. All coverage is subject to certain deductibles or retentions, sublimits, exclusions, terms and conditions common for companies with similar types of operations. Duke Energy Kentucky self-insures its electric transmission and distribution lines against loss due to storm damage and other natural disasters.

The cost of Duke Energy Kentucky's coverage can fluctuate year to year reflecting claims history and conditions of the insurance and reinsurance markets.

In the event of a loss, terms and amounts of insurance and reinsurance available might not be adequate to cover claims and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on Duke Energy Kentucky's results of operations, cash flows or financial position. Duke Energy Kentucky is responsible to the extent losses may be excluded or exceed limits of the coverage available.

ENVIRONMENTAL

Duke Energy Kentucky is subject to federal, state and local regulations regarding air and water quality, hazardous and solid waste disposal, coal ash and other environmental matters, including the Clean Power Plan. These regulations can be changed from time to time, imposing new obligations on Duke Energy Kentucky.

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

Remediation Activities

In addition to the AROs discussed in Note 6, Duke Energy Kentucky is responsible for environmental remediation at various sites. These include certain properties that are part of ongoing operations and sites formerly owned or used by Duke Energy Kentucky. These sites are in various stages of investigation, remediation and monitoring. Managed in conjunction with relevant federal, state and local agencies, remediation activities vary based upon site condition and location, remediation requirements, complexity and sharing of responsibility. If remediation activities involve joint and several liability provisions, strict liability, or cost recovery or contribution actions, Duke Energy Kentucky could potentially be held responsible for environmental impacts caused by other potentially responsible parties, and may also benefit from insurance policies or contractual indemnities that cover some or all cleanup costs. Liabilities are recorded when losses become probable and are reasonably estimable. The total costs that may be incurred cannot be estimated because the extent of environmental impact, allocation among potentially responsible parties, remediation alternatives and/or regulatory decisions have not yet been determined. Additional costs associated with remediation activities are likely to be incurred in the future and could be significant. Costs are typically expensed as Operation, maintenance and other on the Statements of Operations unless regulatory recovery of the costs is deemed probable.

Duke Energy Kentucky has accrued approximately $670 thousand of probable and estimable costs related to its various environmental sites in Other within Other Noncurrent Liabilities on the Balance Sheets as of December 31, 2019, and 2018. Additional losses in excess of recorded reserves are expected to be immaterial for the stages of investigation, remediation and monitoring for the environmental sites that have been evaluated. The maximum amount of the range for all stages of Duke Energy Kentucky's environmental sites cannot be determined at this time.

LITIGATION

Duke Energy Kentucky is involved in other legal, tax and regulatory proceedings arising in the ordinary course of business, some of which involve significant amounts. Duke Energy Kentucky believes the final disposition of these proceedings will not have a material effect on its results of operations, cash flows or financial position. Duke Energy Kentucky expenses legal costs related to the defense of loss contingencies as incurred.

OTHER COMMITMENTS AND CONTINGENCIES

General

As part of its normal business, Duke Energy Kentucky is party to various financial guarantees, performance guarantees and other contractual commitments to extend guarantees of credit and other assistance to various third parties. These guarantees involve elements of performance and credit risk, which are not included on the Balance Sheets. The possibility of Duke Energy Kentucky having to honor its contingencies is largely dependent upon future operations of various third parties or the occurrence of certain future events.

Purchase Obligations

Pipeline and Storage Capacity Contracts

Duke Energy Kentucky enters into pipeline and storage capacity contracts that commit future cash flows to acquire services needed in its business. Costs arising from capacity commitments are recovered via the Gas Cost Adjustment Clause in Kentucky. The time period for fixed payments under these pipeline and storage capacity contracts is up to three years.

Certain storage and pipeline capacity contracts require the payment of demand charges that are based on rates approved by the FERC in order to maintain rights to access the natural gas storage or pipeline capacity on a firm basis during the contract term. The demand charges that are incurred in each period are recognized in the Statements of Operations as part of natural gas purchases and are included in Cost of natural gas.

The following table presents future unconditional purchase obligations under these contracts.

(in thousands)		December 31, 2019
2020	$	6,807
2021		5,231
2022		2,118
2023		—
2024		—
Thereafter		—
Total	$	14,156

4. LEASES

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

(in thousands)		As of January 1, 2019
ROU assets	$	9,566
Operating lease liabilities - current		307
Operating lease liabilities - noncurrent		9,259

As part of its operations, Duke Energy Kentucky leases space on communication towers, meters and office space under various terms and expiration dates. Certain Duke Energy Kentucky lease agreements include options for renewal and early termination. The intent to renew a lease varies depending on the lease type and asset. Renewal options that are reasonably certain to be exercised are included in the lease measurements. The decision to terminate a lease early is dependent on various economic factors. No termination options have been included in any of the lease measurements.

Duke Energy Kentucky has certain lease agreements, which include variable lease payments that are based on the usage of an asset. These variable lease payments are not included in the measurement of the ROU assets or operating lease liabilities on the Balance Sheets.

The following table presents the components of lease expense.

(in thousands)		Year Ended December 31, 2019
Operating lease expense[(a)]	$	1,961
Short-term lease expense[(a)]		709
Variable lease expense[(a)]		108
Finance lease expense		
Amortization of leased assets[(b)]		169
Interest on lease liabilities[(c)]		2
Total finance lease expense		171
Total lease expense	$	2,949

(a) Included in Operations, maintenance and other on the Statements of Operations.
(b) Included in Depreciation and amortization on the Statements of Operations.
(c) Included in Interest Expense on the Statements of Operations.

Rental expense for operating leases, as reported under the former lease standard, was $2 million for the year ended December 31, 2018. This amount is included in Operation, maintenance and other on the Statements of Operations.

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

(in thousands)		December 31, 2019
2020	$	665
2021		676
2022		688
2023		700
2024		712
Thereafter		10,091
Total operating lease payments		13,532
Less: present value discount		(4,273)
Total operating lease liabilities[(a)]	$	9,259

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

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

(in thousands)		December 31, 2018
2019	$	707
2020		666
2021		677
2022		689
2023		701
Thereafter		10,745
Total	$	14,185

There were no finance lease liabilities as of December 31, 2019. The following table presents future minimum lease payments under finance leases, as reported under the former lease standard.

(in thousands)		December 31, 2018
2019	$	438
2020		219
Minimum annual payments		657
Less: amount representing interest		(77)
Total	$	580

The following tables contain additional information related to leases.

(in thousands)	Classification		December 31, 2019
Assets			
Operating	Operating lease ROU assets, net	$	9,151
Total lease assets		$	9,151
Liabilities			
Current			
Operating	Other current liabilities	$	270
Noncurrent			
Operating	Operating lease liabilities		8,989
Total lease liabilities		$	9,259

(in thousands)		Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities[(a)]		
Operating cash flows from operating leases	$	714
Operating cash flows from finance leases		2
Financing cash flows from finance leases		169

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

	December 31, 2019
Weighted-average remaining lease term (years)	
Operating leases	18
Weighted-average discount rate[(a)]	
Operating leases	4.4%

(a) The discount rate is calculated using the rate implicit in a lease if it is readily determinable. Generally, the rate used by the lessor is not provided to Duke Energy Kentucky and in these cases the incremental borrowing rate is used. Duke Energy Kentucky will typically use its fully collateralized incremental borrowing rate as of the commencement date to calculate and record the lease. The incremental borrowing rate is influenced by the lessee's credit rating and lease term and as such may differ for individual leases, embedded leases or portfolios of leased assets.

5. DEBT AND CREDIT FACILITIES

SUMMARY OF DEBT AND RELATED TERMS

The following table summarizes outstanding debt

			December 31,	
(in thousands)	Weighted Average Interest Rate	Year Due	2019	2018
Unsecured debt	4.12%	2023 - 2057	$ 560,000	$ 450,000
Finance leases			—	580
Tax-exempt bonds[(a)(b)]	2.16%	2021 - 2027	76,720	76,720
Money pool borrowings[(b)(c)]	1.89%	2024	107,510	63,875
Unamortized debt discount and premium, net			(199)	(239)
Unamortized debt issuance costs			(2,715)	(1,951)
Total debt	3.60%		$ 741,316	$ 588,985
Short-term money pool borrowings			(82,509)	(38,875)
Current maturities of long-term debt			—	(100,396)
Total long-term debt			$ 658,807	$ 449,714

(a) Includes $27 million that is secured by a bilateral letter of credit agreement.
(b) Floating-rate debt. At December 31, 2018, the weighted average interest rate was 2.53% and 2.79% for tax-exempt bonds and money pool borrowings, respectively.
(c) Includes $25 million classified as Long-Term Debt Payable to Affiliated Companies on the Balance Sheets.

MATURITIES AND CALL OPTIONS

The following table shows the annual maturities of long-term debt for the next five years and thereafter. Amounts presented exclude short-term notes payable.

(in thousands)		December 31, 2019
2020	$	—
2021		50,000
2022		—
2023		25,000
2024		25,000
Thereafter		561,721
Total long-term debt, including current maturities	$	661,721

Duke Energy Kentucky has the ability under certain debt facilities to call and repay the obligation prior to its scheduled maturity. Therefore, the actual timing of future cash repayments could be materially different than as presented above.

SHORT-TERM OBLIGATIONS CLASSIFIED AS LONG-TERM DEBT

Tax-exempt bonds that may be put to Duke Energy Kentucky at the option of the holder and money pool borrowings, which are short-term obligations by nature, are classified as long-term due to Duke Energy Kentucky's intent and ability to utilize such borrowings as long-term financing. As Duke Energy's Master Credit Facility and Duke Energy Kentucky's other bilateral letter of credit agreements have non-cancelable terms in excess of one year as of the balance sheet date, Duke Energy Kentucky has the ability to refinance these short-term obligations on a long-term basis. See "Available Credit Facilities" below for additional information.

At December 31, 2019 and 2018, $27 million of tax-exempt bonds and $25 million of money pool borrowings were classified as Long-Term Debt and Long-Term Debt Payable to Affiliated Companies, respectively, on the Balance Sheets.

SUMMARY OF SIGNIFICANT DEBT ISSUANCES

In 2019, Duke Energy Kentucky issued $210 million of unsecured debentures of which $95 million carry a fixed interest rate of 3.23% and mature October 2025, $75 million carry a fixed interest rate of 3.56% and mature October 2029 and $40 million carry a fixed interest rate of 4.32% and mature July 2049. The $40 million tranche closed and funded in July 2019 and the remaining tranches closed in September 2019. The proceeds were used to refinance Duke Energy Kentucky's $100 million, 4.65% debentures, which matured October 2019, to pay down short-term intercompany debt and for general corporate purposes.

In 2018, Duke Energy Kentucky issued $100 million of unsecured debentures, of which $25 million carry a fixed interest rate of 4.01% and mature October 2023, $40 million carry a fixed interest rate of 4.18% and mature October 2028 and $35 million carry a fixed interest rate of 4.62% and mature December 2048. The first two tranches totaling $65 million were closed and funded in October 2018, and the remaining tranche of $35 million closed in December 2018. The proceeds were used to pay down short-term debt, fund capital expenditures and for general corporate purposes.

AVAILABLE CREDIT FACILITIES

In March 2019, Duke Energy amended its existing $8 billion Master Credit Facility to extend the termination date to March 2024. Duke Energy Kentucky has borrowing capacity under the Master Credit Facility up to a specified sublimit. Duke Energy has the unilateral ability at any time to increase or decrease Duke Energy Kentucky's borrowing sublimit, subject to a maximum sublimit. The amount available to Duke Energy Kentucky under the Master Credit Facility may be reduced to backstop issuances of commercial paper, certain letters of credit and variable-rate demand tax-exempt bonds that may be put to Duke Energy Kentucky at the option of the holder. At December 31, 2019, Duke Energy Kentucky had a borrowing sublimit of $150 million and available capacity of $53 million under the Master Credit Facility.

Duke Energy Kentucky and Duke Energy Indiana, LLC, a wholly owned subsidiary of Duke Energy, collectively have a $156 million bilateral letter of credit agreement. In February 2018, the bilateral letter of credit agreement was amended to extend the termination date from February 2019 to February 2023. Duke Energy Kentucky may request the issuance of letters of credit up to $27 million on its behalf to support various series of tax-exempt bonds. This credit facility may not be used for any purpose other than to support the tax-exempt bonds.

OTHER DEBT MATTERS

Money Pool

Duke Energy Kentucky receives support for its short-term borrowing needs through participation with Duke Energy and certain of its subsidiaries in a money pool arrangement. Under this arrangement, those companies with short-term funds may provide short-term loans to affiliates participating under this arrangement. The money pool is structured such that Duke Energy Kentucky separately manages its cash needs and working capital requirements. Accordingly, there is no net settlement of receivables and payables between money pool participants. Duke Energy may loan funds to its participating subsidiaries, but may not borrow funds through the money pool.

Money pool receivable balances are reflected within Notes receivable from affiliated companies on the Balance Sheets. Money pool payable balances are reflected within either Notes payable to affiliated companies or Long-Term Debt Payable to Affiliated Companies on the Balance Sheets.

Restrictive Debt Covenants

Duke Energy Kentucky's debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio not to exceed 65% for each borrower. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements. As of December 31, 2019, Duke Energy Kentucky was in compliance with all covenants related to its debt agreements. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

6. ASSET RETIREMENT OBLIGATIONS

Duke Energy Kentucky records an ARO when it has a legal obligation to incur retirement costs associated with the retirement of a long-lived asset and the obligation can be reasonably estimated. Certain assets have an indeterminate life, and thus the fair value of the retirement obligation is not reasonably estimable. A liability for these AROs will be recorded when a fair value is determinable.

Duke Energy Kentucky's regulated electric and regulated natural gas operations accrue costs of removal for property that does not have an associated legal retirement obligation based on regulatory orders from the KPSC. These costs of removal are recorded as a regulatory liability in accordance with regulatory accounting treatment. See Note 2 for the estimated cost of removal for assets without an associated legal retirement obligation, which are included in Regulatory liabilities on the Balance Sheets as of December 31, 2019, and 2018.

Duke Energy Kentucky is subject to state and federal regulations covering the closure of coal ash impoundments, including the EPA Coal Combustion Residuals (CCR) Rule. AROs recorded on the Balance Sheets include the legal obligation for the disposal of CCR, which is based upon estimated closure costs for impacted ash impoundments. The amount recorded represents the discounted cash flows for estimated closure costs based upon specific closure plans. Actual costs to be incurred will be dependent upon factors that vary from site to site. The most significant factors are the method and time frame of closure at the individual sites. Closure methods considered include removing the water from ash basins, consolidating material as necessary and capping the ash with a synthetic barrier, excavating and relocating the ash to a lined structural fill or lined landfill or recycling the ash for concrete or some other beneficial use. The ultimate method and timetable for closure will be in compliance with standards set by federal and state regulations and other agreements. The ARO amount will be adjusted as additional information is gained through the closure and post-closure process, including acceptance and approval of compliance approaches, which may change management assumptions, and may result in a material change to the balance. Asset retirement costs associated with coal ash AROs at the East Bend Station are included within Property, Plant and Equipment on the Balance Sheets.

In addition to the coal ash AROs, Duke Energy Kentucky also has legal obligations related to the retirement of gas mains and asbestos remediation.

The following table presents the changes in the liability associated with AROs.

	Years Ended December 31,	
(in thousands)	2019	2018
Balance at beginning of period	$ 62,826	$ 54,582
Accretion expense[a]	2,301	2,065
Liabilities settled[b]	(12,098)	(4,204)
Revisions to estimates of cash flows[c]	(3,249)	10,383
Balance at end of period	$ 49,780	$ 62,826

(a) All accretion expense for the years ended December 31, 2019, and 2018, relates to Duke Energy Kentucky's regulated operations and has been deferred in accordance with regulatory accounting treatment.

(b) Amounts primarily relate to ash basin closure costs at the East Bend Station and completion of asbestos remediation at Miami Fort 6.

(c) Amounts primarily relate to changes in cost estimates for ash impoundments.

7. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment.

	Estimated Useful Life	December 31,	
(in thousands)	(Years)	2019	2018
Land		$ 29,253	$ 25,868
Plant[a]			
Electric generation, distribution and transmission	15 – 100	1,869,385	1,708,224
Natural gas transmission and distribution	12 – 50	616,949	557,214
Other buildings and improvements	35 – 90	13,705	18,284
Equipment	5 – 25	32,205	29,865
Construction in process		115,872	119,830
Other	5 – 18	62,425	58,612
Total property, plant and equipment		2,739,794	2,517,897
Accumulated depreciation and amortization[b]		(991,145)	(965,124)
Net property, plant and equipment[c]		$ 1,748,649	$ 1,552,773

(a) Includes finance lease amounts of $20.9 million at December 31, 2018.

(b) Includes accumulated amortization of finance leases of $4.4 million at December 31, 2018.

(c) The debt component of AFUDC totaled $2 million and $1.9 million at December 31, 2019, and 2018, respectively.

8. OTHER INCOME AND EXPENSES, NET

The components of Other Income and Expenses, net on the Statements of Operations are as follows.

	Years Ended December 31,	
(in thousands)	2019	2018
Income/(Expense):		
Interest income	$ 1,703	$ 1,624
AFUDC equity	2,505	3,144
Other	3,746	1,859
Other Income and Expenses, net	**$ 7,954**	$ 6,627

9. RELATED PARTY TRANSACTIONS

Duke Energy Kentucky engages in related party transactions, which are generally performed at cost and in accordance with KPSC and FERC regulations. Refer to the Balance Sheets for balances due to or from related parties. Material amounts related to transactions with related parties included in the Statements of Operations are presented in the following table.

	Years Ended December 31,	
(in thousands)	2019	2018
Corporate governance and shared service expenses[(a)]	$ 82,931	$ 91,003

(a) Duke Energy Kentucky is charged its proportionate share of costs, primarily related to human resources, employee benefits, information technology, legal and accounting fees, as well as other third-party costs, from an unconsolidated affiliate that is a consolidated affiliate of Duke Energy. These amounts are recorded in Operation, maintenance and other within Operating Expenses on the Statements of Operations.

In addition to the amounts presented above, Duke Energy Kentucky has other affiliate transactions, including certain indemnification coverages through Duke Energy's wholly owned captive insurance subsidiary, rental of office space, participation in a money pool arrangement with Duke Energy and certain of its subsidiaries, other operational transactions and its proportionate share of certain charged expenses. See Note 5 for more information regarding the money pool. These transactions are incurred in the ordinary course of business and are eliminated in Duke Energy's Consolidated Financial Statements.

Certain trade receivables have been sold by Duke Energy Kentucky to CRC, an unconsolidated entity formed by a subsidiary of Duke Energy. The proceeds obtained from the sales of receivables are largely cash but do include a subordinated note from CRC for a portion of the purchase price. See Note 12 for further information related to the sales of these receivables.

Intercompany Income Taxes

Duke Energy and its subsidiaries file a consolidated federal income tax return and other state and jurisdictional returns. Duke Energy Kentucky has a tax sharing agreement with Duke Energy for the allocation of consolidated tax liabilities and benefits. Income taxes recorded represent amounts Duke Energy Kentucky would incur as a separate C-Corporation. Duke Energy Kentucky had an intercompany tax receivable balance of $1 million at December 31, 2019, and an intercompany tax payable balance of $2 million at December 31, 2018.

10. DERIVATIVES AND HEDGING

COMMODITY PRICE RISK

Duke Energy Kentucky has limited exposure to market price changes of fuel and emission allowance costs incurred for its retail customers due to the use of cost tracking and recovery mechanisms. Duke Energy Kentucky does have exposure to the impact of market fluctuations in the prices of electricity, fuel and emission allowances associated with its generation output not utilized to serve retail operations or committed load (off-system, wholesale power sales). Duke Energy Kentucky's outstanding commodity derivatives, FTRs, had a notional volume of 1,887 gigawatt-hours and 1,786 gigawatt-hours at December 31, 2019 and 2018, respectively.

See Note 11 for additional information on the fair value of commodity derivatives.

INTEREST RATE RISK

Duke Energy Kentucky is exposed to changes in interest rates as a result of its issuance or anticipated issuance of variable-rate and fixed-rate debt. Interest rate risk is managed by limiting variable-rate exposure to a percentage of total debt and by monitoring changes in interest rates. To manage risk associated with changes in interest rates, Duke Energy Kentucky may enter into financial contracts including interest rate swaps and U.S. Treasury lock agreements. The notional amount of interest rate swaps outstanding was $26.7 million at December 31, 2019, and 2018. Financial contracts entered into by Duke Energy Kentucky are not designated as a hedge because they are accounted for under regulatory accounting. With regulatory accounting, the mark-to-market gains or losses are deferred as regulatory liabilities or assets, respectively. Regulatory assets and regulatory liabilities are amortized consistent with the treatment of related costs in the ratemaking process. The accrual of interest on swaps is recorded as Interest Expense on the Statements of Operations.

See Note 11 for additional information on the fair value of interest rate derivatives.

CREDIT RISK

Duke Energy Kentucky analyzes the financial condition of counterparties prior to entering into agreements and establishes credit limits and monitors the appropriateness of those limits on an ongoing basis. Credit limits and collateral requirements for retail electric customers are established by the KPSC.

Duke Energy Kentucky's industry has historically operated under negotiated credit lines for physical delivery contracts. Duke Energy Kentucky may use master collateral agreements to mitigate certain credit exposures. The collateral agreements require certain counterparties to post cash or letters of credit for the amount of exposure in excess of an established threshold. The threshold amount represents an unsecured credit limit determined in accordance with the corporate credit policy. Collateral agreements also provide that the inability to post collateral is sufficient cause to terminate contracts and liquidate all positions.

Duke Energy Kentucky also obtains cash or letters of credit from customers to provide credit support outside of collateral agreements, where appropriate, based on its financial analysis of the customer and the regulatory or contractual terms and conditions applicable to each transaction.

11. FAIR VALUE MEASUREMENTS

Fair value is the exchange price to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The fair value definition focuses on an exit price versus the acquisition cost. Fair value measurements use market data or assumptions market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs may be readily observable, corroborated by market data or generally unobservable. Valuation techniques maximize the use of observable inputs and minimize use of unobservable inputs. A midmarket pricing convention (the midpoint price between bid and ask prices) is permitted for use as a practical expedient. Fair value measurements are classified in three levels based on the fair value hierarchy as defined by GAAP.

Fair value accounting guidance permits entities to elect to measure certain financial instruments that are not required to be accounted for at fair value, such as equity method investments or the company's own debt, at fair value. Duke Energy Kentucky has not elected to record any of these items at fair value.

Commodity derivatives

If forward price curves are not observable for the full term of the contract and the unobservable period had more than an insignificant impact on the valuation, the commodity derivative is classified as Level 3. The valuation technique and unobservable input for an FTR is regional transmission organization auction pricing and FTR price - per megawatt-hour, respectively.

Interest rate derivatives

All over-the-counter interest rate contract derivatives are valued using financial models that utilize observable inputs for similar instruments and are classified as Level 2. Inputs include forward interest rate curves, notional amounts, interest rates and credit quality of the counterparties.

QUANTITATIVE DISCLOSURES

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Balance Sheets. Derivative amounts in the table below exclude cash collateral.

	December 31, 2019		
(in thousands)	**Total Fair Value**	**Level 2**	**Level 3**
Derivative assets[(a)]	**$ 3,507**	**$ —**	**$ 3,507**
Derivative liabilities[(b)]	**(5,293)**	**(5,293)**	**—**
Net (liabilities) assets	**$ (1,786)**	**$ (5,293)**	**$ 3,507**

	December 31, 2018		
(in thousands)	**Total Fair Value**	**Level 2**	**Level 3**
Derivative assets[(a)]	$ 6,056	$ —	$ 6,056
Derivative liabilities[(b)]	(4,487)	(4,487)	—
Net assets (liabilities)	$ 1,569	$ (4,487)	$ 6,056

(a) Included in Other within Current Assets and Other within Other Noncurrent Assets on the Balance Sheets. The amounts classified as Level 3 relate to FTRs.

(b) Included in Other within Current Liabilities and Other within Other Noncurrent Liabilities on the Balance Sheets. The amounts classified as Level 2 relate to interest rate swaps.

The following table provides a reconciliation of beginning and ending balances of assets and liabilities measured at fair value on a recurring basis where the determination of fair value includes significant unobservable inputs (Level 3).

	Derivatives (net)	
	Years Ended December 31,	
(in thousands)	2019	2018
Balance at beginning of period	$ 6,056	$ 1,444
Purchases, sales, issuances and settlements:		
Purchases	8,608	6,855
Settlements	(7,923)	(4,131)
Total (losses) gains included on the Balance Sheets as regulatory assets or liabilities	(3,234)	1,888
Balance at end of period	$ 3,507	$ 6,056

OTHER FAIR VALUE DISCLOSURES

The fair value of long-term debt, including current maturities, is summarized in the following table. Judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates determined are not necessarily indicative of the amounts Duke Energy Kentucky could have settled in current markets. The fair value of long-term debt is determined using Level 2 measurements.

	December 31, 2019		December 31, 2018	
(in thousands)	Book value	Fair value	Book value	Fair value
Long-Term debt, including current maturities	$ 658,807	$ 708,433	$ 550,110	$ 553,922

At December 31, 2019, and 2018, the fair value of cash and cash equivalents, accounts and notes receivable, and accounts and notes payable are not materially different from their carrying amounts because of the short-term nature of these instruments and/or because the stated rates approximate market rates.

12. VARIABLE INTEREST ENTITIES

A variable interest entity (VIE) is an entity that is evaluated for consolidation using more than a simple analysis of voting control. The analysis to determine whether an entity is a VIE considers contracts with an entity, credit support for an entity, the adequacy of the equity investment of an entity and the relationship of voting power to the amount of equity invested in an entity. This analysis is performed either upon the creation of a legal entity or upon the occurrence of an event requiring reevaluation, such as a significant change in an entity's assets or activities. A qualitative analysis of control determines the party that consolidates a VIE. This assessment is based on (i) what party has the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) what party has rights to receive benefits or is obligated to absorb losses that could potentially be significant to the VIE. The analysis of the party that consolidates a VIE is a continual reassessment.

Cinergy Receivables Company

CRC is a bankruptcy remote, special purpose entity that is an affiliate of Duke Energy Kentucky. As discussed below, Duke Energy Kentucky does not consolidate CRC as it is not the primary beneficiary. On a revolving basis, CRC buys certain accounts receivable arising from the sale of electricity, natural gas and related services from Duke Energy Kentucky. CRC borrows amounts under a credit facility to buy the receivables from Duke Energy Kentucky. Borrowing availability from the credit facility is limited to the amount of qualified receivables sold to CRC. The sole source of funds to satisfy the related debt obligation is cash collections from the receivables.

The proceeds Duke Energy Kentucky receives from the sale of receivables to CRC are approximately 75% cash and 25% in the form of a subordinated note from CRC. The subordinated note is a retained interest in the receivables sold. Duke Energy Kentucky had receivables of $16.0 million and $23.1 million from CRC at December 31, 2019, and 2018, respectively. These balances are included in Receivables from affiliated companies on the Balance Sheets and reflect Duke Energy Kentucky's retained interest in receivables sold to CRC.

CRC is considered a VIE because (i) equity capitalization is insufficient to support its operations, (ii) power to direct the activities that most significantly impact the economic performance of the entity is not held by the equity holder and (iii) deficiencies in net worth of CRC are funded by Duke Energy. The most significant activities that impact the economic performance of CRC are decisions made to manage delinquent receivables. Duke Energy is considered the primary beneficiary and consolidates CRC as it makes these decisions. Duke Energy Kentucky does not consolidate CRC.

The subordinated note held by Duke Energy Kentucky is stated at fair value. Carrying values of retained interests are determined by allocating carrying value of the receivables between assets sold and interests retained based on relative fair value. The allocated basis of the subordinated note is not materially different than the face value because (i) the receivables generally turnover in less than two months, (ii) credit losses are reasonably predictable due to the broad customer base and lack of significant concentration and (iii) the equity in CRC is subordinate to all retained interests and thus would absorb losses first. The hypothetical effect on fair value of the retained interests assuming both a 10% and a 20% unfavorable variation in credit losses or discount rates is not material due to the short turnover of receivables and historically low credit loss history. Interest accrues to Duke Energy Kentucky on the retained interests using the acceptable yield method. This method generally approximates the stated rate on the note since the allocated basis and the face value are nearly equivalent. An impairment charge is recorded against the carrying value of both retained interests and purchased beneficial interest whenever it is determined that an other-than-temporary impairment has occurred. Duke Energy Kentucky's maximum exposure to loss does not exceed the carrying value.

Key assumptions used in estimating fair value are detailed in the following table.

	2019	2018
Anticipated credit loss ratio	**0.4%**	0.4%
Discount rate	**3.3%**	3.0%
Receivables turnover rate	**11.4%**	11.5%

The following table presents gross and net receivables sold.

	December 31,	
(in thousands)	**2019**	**2018**
Receivables sold	**$ 61,804**	$ 66,308
Less: Retained interests	**16,029**	23,070
Net receivables sold	**$ 45,775**	$ 43,238

The following table shows sales and cash flows related to receivables sold.

	Years Ended December 31,	
(in thousands)	**2019**	**2018**
Sales		
Receivables sold	**$ 483,703**	$ 478,134
Loss recognized on sale	**2,381**	2,290
Cash flows		
Cash proceeds from receivables sold	**$ 488,364**	$ 472,511
Collection fees received	**242**	239
Return received on retained interests	**1,577**	1,541

Cash flows from sales of receivables are reflected within Cash Flows from Operating Activities on the Statements of Cash Flows.

Collection fees received in connection with the servicing of transferred accounts receivable are included in Operation, maintenance and other on the Statements of Operations. The loss recognized on sales of receivables is calculated monthly by multiplying receivables sold during the month by the required discount. The required discount is derived monthly utilizing a three-year weighted average formula that considers charge-off history, late charge history and turnover history on the sold receivables, as well as a component for the time value of money. The discount rate, or component for the time value of money, is the prior month-end London Interbank Offered Rate plus a fixed rate of 1.00%.

13. REVENUE

Duke Energy Kentucky recognizes revenue consistent with amounts billed under tariff offerings or at contractually agreed upon rates based on actual physical delivery of electric or natural gas service, including estimated volumes delivered when billings have not yet occurred. As such, the majority of Duke Energy Kentucky's revenues have fixed pricing based on the contractual terms of the published tariffs, with variability in expected cash flows attributable to the customer's volumetric demand and ultimate quantities of energy or natural gas supplied and used during the billing period. The stand-alone selling price of related sales are designed to support recovery of prudently incurred costs and an appropriate return on invested assets and are primarily governed by published tariff rates or contractual agreements approved by relevant regulatory bodies. Certain excise taxes and franchise fees levied by state or local governments are required to be paid even if not collected from the customer. These taxes are recognized on a gross basis as part of revenues. Duke Energy Kentucky elects to account for all other taxes net of revenues.

Performance obligations are satisfied over time as energy or natural gas is delivered and consumed with billings generally occurring monthly and related payments due within 30 days, depending on regulatory requirements. In no event does the timing between payment and delivery of the goods and services exceed one year. Using this output method for revenue recognition provides a faithful depiction of the transfer of electric and natural gas service as customers obtain control of the commodity and benefit from its use at delivery. Additionally, Duke Energy Kentucky has an enforceable right to consideration for energy or natural gas delivered at any discrete point in time and will recognize revenue at an amount that reflects the consideration to which Duke Energy Kentucky is entitled for the energy or natural gas delivered.

As described above, the majority of Duke Energy Kentucky's tariff revenues are at-will and, as such, related contracts with customers have an expected duration of one year or less and will not have future performance obligations for disclosure.

Duke Energy Kentucky earns substantially all of its revenues through the sale of electricity and natural gas.

Electricity Sales

Electric sales revenues are earned primarily through retail and wholesale electric service through the generation, transmission, distribution and sale of electricity. Duke Energy Kentucky generally provides retail electric service customers with their full electric load requirements and sells wholesale block sales of electricity into the market.

Retail electric service is generally marketed throughout Duke Energy Kentucky's electric service territory through standard service offers. The standard service offers are through tariffs determined by the KPSC. Each tariff, which is assigned to customers based on customer class, has multiple components such as an energy charge, customer charge, demand charge and applicable riders. Duke Energy Kentucky considers each of these components to be aggregated into a single performance obligation for providing electric service. Electricity is considered a single performance obligation satisfied over time consistent with the series guidance and is provided and consumed over the billing period, generally one month. Retail electric service is typically provided to at-will customers who can cancel service at any time, without a substantive penalty. Additionally, Duke Energy Kentucky adheres to applicable regulatory requirements to ensure the collectability of amounts billed and appropriate mitigating procedures are followed when necessary. As such, revenue from contracts with customers is equivalent to the electricity supplied and billed in that period (including unbilled estimates).

Wholesale electric service is provided through block sales of electricity. Revenues for block sales are recognized monthly as energy is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates.

Natural Gas Sales

Natural gas sales revenues are earned through retail natural gas service through the transportation, distribution and sale of natural gas. Duke Energy Kentucky generally provides natural gas service customers with all natural gas load requirements. Additionally, while natural gas can be stored, substantially all natural gas provided by Duke Energy Kentucky is consumed by customers simultaneously with receipt of delivery.

Retail natural gas service is marketed throughout Duke Energy Kentucky's natural gas service territory using published tariff rates. The tariff rates are established by the KPSC. Each tariff, which is assigned to customers based on customer class, has multiple components, such as a commodity charge, customer or monthly charge and transportation costs. Duke Energy Kentucky considers each of these components to be aggregated into a single performance obligation for providing natural gas service. For contracts where Duke Energy Kentucky provides all of the customer's natural gas needs, the delivery of natural gas is considered a single performance obligation satisfied over time, and revenue is recognized monthly based on billings and unbilled estimates as service is provided and the commodity is consumed over the billing period. Additionally, natural gas service is typically at-will and customers can cancel service at any time, without a substantive penalty. Duke Energy Kentucky also adheres to applicable regulatory requirements to ensure the collectability of amounts billed and receivable and appropriate mitigating procedures are followed when necessary.

Disaggregated Revenues

For electric and natural gas sales, revenue by customer class is most meaningful to Duke Energy Kentucky as each respective customer class collectively represents unique customer expectations of service, generally has different energy and demand requirements and operates under tailored, regulatory approved pricing structures. Additionally, each customer class is impacted differently by weather and a variety of economic factors including the level of population growth, economic investment, employment levels and regulatory activities. As such, analyzing revenues disaggregated by customer class allows Duke Energy Kentucky to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

Disaggregated revenues are presented as follows:

(in thousands)	Years Ended December 31,	
By market or type of customer	2019	2018
Electricity Sales		
Residential	$ 138,561	$ 142,113
General	151,658	145,904
Industrial	62,249	58,210
Wholesale[(a)]	11,698	11,566
Other revenues	7,713	7,998
Total Electricity Sales revenue from contracts with customers	$ 371,879	$ 365,791
Natural Gas Sales		
Residential	$ 66,055	$ 66,699
Commercial	28,034	28,580
Industrial	5,307	4,329
Other revenues	2,674	2,446
Total Natural Gas Sales revenue from contracts with customers	$ 102,070	$ 102,054
Total revenue from contracts with customers	$ 473,949	$ 467,845
Other revenue sources[(b)]	$ 4,676	15,210
Total revenues	$ 478,625	$ 483,055

(a) Duke Energy Kentucky nets wholesale electric sales and purchases on an hourly basis. As such, the net position may result in fluctuations between positive and negative net revenues at the end of a reporting period.

(b) Other revenue sources include revenues from derivatives, leases and alternative revenue programs that are not considered revenues from contracts with customers.

IMPACT OF WEATHER AND THE TIMING OF BILLING PERIODS

Revenues and costs are influenced by seasonal weather patterns. Peak sales of electricity occur during the summer and winter months, which results in higher revenue and cash flows during these periods. By contrast, lower sales of electricity occur during the spring and fall, allowing for scheduled plant maintenance. Residential and general service customers are more impacted by weather than industrial customers. Estimated weather impacts are based on actual current period weather compared to normal weather conditions. Normal weather conditions are defined as the long-term average of actual historical weather conditions. Heating degree days measure the variation in weather based on the extent the average daily temperature falls below a base temperature. Cooling degree days measure the variation in weather based on the extent the average daily temperature rises above the base temperature. Each degree of temperature below the base temperature counts as one heating degree day and each degree of temperature above the base temperature counts as one cooling degree day.

The estimated impact of weather on earnings for electricity sales 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.

Natural gas costs and revenues are influenced by seasonal patterns due to peak natural gas sales occurring during the winter months as a result of space heating requirements. Residential customers are the most impacted by weather. There are certain regulatory mechanisms for the Kentucky service territory that normalize the margins collected from certain customer classes during the winter.

UNBILLED REVENUE

Unbilled revenues are recognized by applying customer billing rates to the estimated volumes of energy or natural gas delivered but not yet billed. Unbilled revenues can vary significantly from period to period as a result of seasonality, weather, customer usage patterns, customer mix, average price in effect for customer classes, timing of rendering customer bills and meter reading schedules, and the impact of weather normalization or margin decoupling mechanisms. Receivables on the Balance Sheets include amounts related to unbilled wholesale revenues of $51 thousand and $390 thousand at December 31, 2019, and 2018, respectively.

Duke Energy Kentucky sells nearly all of its retail accounts receivable, including receivables for unbilled revenues to CRC on a revolving basis. As discussed further in Note 8, Duke Energy Kentucky accounts for these transfers of receivables to CRC as sales. Accordingly, the receivables sold are not reflected on the Balance Sheets. Receivables for unbilled revenues included in the sales of accounts receivable to CRC were $22 million and $24 million at December 31, 2019, and 2018, respectively.

14. EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT RETIREMENT PLANS

Duke Energy Kentucky participates in qualified and non-qualified defined benefit retirement plans and other post-retirement benefit plans sponsored by Duke Energy. Duke Energy allocates pension and other post-retirement obligations and costs related to these plans to Duke Energy Kentucky. The plans cover most employees using a cash balance formula. Under a cash balance formula, a plan participant accumulates a retirement benefit consisting of pay credits based upon a percentage of current eligible earnings based on age and/or years of service and interest credits. Certain employees are covered under plans that use a final average earnings formula. Under these average earnings formulas, a plan participant accumulates a retirement benefit equal to the sum of percentages of their (i) highest three-year or four-year average earnings, (ii) highest three-year or four-year average earnings in excess of covered compensation per year of participation (maximum of 35 years) and/or (iii) highest three-year average earnings times years of participation in excess of 35 years. Duke Energy also maintains, and Duke Energy Kentucky participates in, non-qualified, non-contributory defined benefit retirement plans which cover certain executives. The qualified and non-qualified non-contributory defined benefit plans are closed to new participants.

Duke Energy approved plan amendments to restructure its qualified non-contributory defined benefit retirement plans, effective January 1, 2018. The restructuring involved (i) the spin-off of the majority of inactive participants from two plans into a separate inactive plan and (ii) the merger of the active participant portions of such plans. Benefits offered to the plan participants remain unchanged. Actuarial gains and losses associated with the inactive plan will be amortized over the remaining life expectancy of the inactive participants.

Duke Energy uses a December 31 measurement date for its defined benefit retirement plan assets and obligations.

As a result of the application of settlement accounting due to total lump-sum benefit payments exceeding the settlement threshold (defined as the sum of the service cost and interest cost on projected benefit obligation components of net periodic pension costs) for one of the qualified pension plans in which it participates, Duke Energy Kentucky recognized settlement charges of $365 thousand as a regulatory asset within Other Noncurrent Assets on the Balance Sheets as of December 31, 2019. Settlement charges include amounts allocated by Duke Energy for employees of Duke Energy Kentucky and allocated charges for their proportionate share of settlement charges for employees of Duke Energy's shared services affiliate.

Duke Energy's policy is to fund amounts on an actuarial basis to provide assets sufficient to meet benefit payments to be paid to plan participants. Actual contributions for Duke Energy Kentucky were $481 thousand and $72 thousand for the years ended December 31, 2019, and 2018, respectively. Duke Energy Kentucky does not anticipate making any contributions in 2020.

Net periodic benefit costs disclosed in the tables below represent the cost of the respective plan for the periods presented prior to capitalization of amounts reflected as Net property, plant and equipment, on the Balance Sheets. Only the service cost component of net periodic benefit costs is eligible to be capitalized. The remaining non-capitalized portions of net periodic benefit costs are classified as either: (i) service cost, which is recorded in Operations, maintenance and other on the Statements of Operations; or as (ii) components of non-service cost, which is recorded in Other income and expenses, net, on the Statements of Operations. Amounts presented in the tables below represent the amounts of pension and other post-retirement benefit cost allocated by Duke Energy for employees of Duke Energy Kentucky. Additionally, Duke Energy Kentucky is allocated its proportionate share of pension and other post-retirement benefit cost for employees of Duke Energy's shared services affiliate that provides support to Duke Energy Kentucky. These allocated amounts are included in the governance and shared services costs discussed in Note 9.

QUALIFIED PENSION PLANS

Components of Net Periodic Pension Costs

	Years Ended December 31,	
(in thousands)	**2019**	**2018**
Service cost	**$ 1,218**	$ 1,488
Interest cost on projected benefit obligation	**4,315**	4,134
Expected return on plan assets	**(6,677)**	(6,473)
Amortization of prior service credit	**(100)**	(100)
Amortization of actuarial loss	**1,431**	1,957
Amortization of settlement charges	**15**	—
Net periodic pension costs	**$ 202**	$ 1,006

Amounts Recognized in Regulatory Assets

	December 31,	
(in thousands)	**2019**	**2018**
Regulatory assets, net (decrease) increase	**$ 4,510**	$ (2,652)

Reconciliation of Funded Status to Net Amount Recognized

(in thousands)	Years Ended December 31, 2019	2018
Change in Projected Benefit Obligation		
Obligation at prior measurement date	$ 103,395	$ 116,977
Service cost	1,121	1,387
Interest cost	4,315	4,134
Actuarial losses (gains)	15,276	(11,107)
Transfers [(a)]	(1,640)	—
Benefits paid	(5,381)	(7,996)
Obligation at measurement date	$ 117,086	$ 103,395
Accumulated Benefit Obligation at measurement date	$ 114,975	$ 101,000
Change in Fair Value of Plan Assets		
Plan assets at prior measurement date	$ 94,292	$ 106,157
Actual return on plan assets	15,515	(3,941)
Benefits paid	(5,381)	(7,996)
Employer contributions	481	72
Transfers [(a)]	(1,640)	—
Plan assets at measurement date	$ 103,267	$ 94,292
Funded status of plan	$ (13,819)	$ (9,103)

(a) Transfers represents net amounts associated with plan participants that have moved to/from other Duke Energy subsidiaries.

Amounts Recognized in the Balance Sheets

(in thousands)	December 31, 2019	2018
Prefunded pension[(a)]	$ 9,775	$ 7,330
Noncurrent pension liability[(b)]	23,594	16,433
Net liability recognized	$ (13,819)	$ (9,103)
Regulatory assets	$ 34,157	$ 29,647
Amounts to be reported in net periodic pension expense in the next year		
Unrecognized net actuarial loss	$ 1,836	$ 875
Unrecognized prior service credit	(98)	(100)

(a) Included in Other within Investments and Other Assets on the Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Balance Sheets.

Information for Plans with Accumulated Benefit Obligation in Excess of Plan Assets

(in thousands)	December 31, 2019	2018
Projected benefit obligation	$ 50,494	$ 40,901
Accumulated benefit obligation	48,383	38,506
Fair value of plan assets	26,901	24,468

Assumptions Used for Pension Benefits Accounting

	December 31, 2019	2018
Benefit Obligations		
Discount rate	**3.30%**	4.30%
Salary increase	**3.50%**	3.50%
Net Periodic Benefit Cost		
Discount rate	**4.30%**	3.60%
Salary increase	**3.50%**	3.50%
Expected long-term rate of return on plan assets	**6.85%**	6.50%

The discount rate used to determine the current year pension obligation and following year's pension expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high quality corporate bonds that generate sufficient cash flow to provide for the projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

NON-QUALIFIED PENSION PLANS

The accumulated benefit obligation, which equals the projected benefit obligation for non-qualified pension plans, was $133 thousand for Duke Energy Kentucky as of December 31, 2019. Employer contributions, which equal benefits paid for non-qualified pension plans, were $11 thousand for the year ended December 31, 2019. Net periodic pension costs for non-qualified pension plans were not material for the years ended December 31, 2019 or 2018.

OTHER POST-RETIREMENT BENEFIT PLANS

Duke Energy provides, and Duke Energy Kentucky participates in, some health care and life insurance benefits for retired employees on a contributory and non-contributory basis. Employees are eligible for these benefits if they have met age and service requirements at retirement, as defined in the plans. The health care benefits include medical, dental and prescription drug coverage and are subject to certain limitations, such as deductibles and co-payments.

Duke Energy did not make any pre-funding contributions to its other post-retirement benefit plans during the years ended December 31, 2019, and 2018.

Components of Net Periodic Other Post-Retirement Benefit Costs

	Years Ended December 31,	
(in thousands)	**2019**	**2018**
Service cost	**$ 150**	$ 202
Interest cost on projected benefit obligation	**225**	210
Expected return on plan assets	**(72)**	(69)
Amortization of prior service credit	**(236)**	(236)
Amortization of actuarial loss	**247**	286
Net periodic post-retirement pension costs	**$ 314**	$ 393

Amounts Recognized in Regulatory Assets and Regulatory Liabilities

	December 31,	
(in thousands)	**2019**	**2018**
Regulatory assets, net decrease	**$ (232)**	$ (255)
Regulatory liabilities, net increase	**123**	373

Reconciliation of Funded Status to Accrued Other Post-Retirement Benefit Costs

(in thousands)	Years Ended December 31, 2019	2018
Change in Projected Benefit Obligation		
Accumulated post-retirement benefit obligation at prior measurement date	$ 5,557	$ 6,052
Service cost	150	202
Interest cost	225	210
Plan participants' contributions	213	211
Actuarial gains	(205)	(699)
Benefits paid	(526)	(622)
Accrued retiree drug subsidy	182	203
Accumulated post-retirement benefit obligation at measurement date	$ 5,596	$ 5,557
Change in Fair Value of Plan Assets		
Plan assets at prior measurement date	$ 1,352	$ 1,433
Actual return on plan assets	211	(52)
Plan participants' contributions	213	211
Benefits paid	(526)	(622)
Employer contributions	312	382
Plan assets at measurement date	$ 1,562	$ 1,352
Funded status of plan	$ (4,034)	$ (4,205)

Amounts Recognized in the Balance Sheets

(in thousands)	December 31, 2019	2018
Current post-retirement liability[(a)]	$ 163	$ 162
Noncurrent post-retirement liability[(b)]	3,871	4,043
Total accrued post-retirement liability	$ 4,034	$ 4,205
Regulatory assets	$ 1,843	$ 2,075
Regulatory liabilities	$ 5,329	$ 5,206
Amounts to be recognized in net periodic pension expense in the next year		
Unrecognized net actuarial loss	$ 23	$ 15
Unrecognized prior service credit	$ (236)	$ (236)

(a) Included in Other within Current Liabilities on the Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Balance Sheets.

Assumptions Used for Other Post-Retirement Benefits Accounting

	December 31, 2019	2018
Benefit Obligations		
Discount rate	3.30%	4.30%
Net Periodic Benefit Cost		
Discount rate	4.30%	3.60%
Expected long-term rate of return on plan assets	6.85%	6.50%

The discount rate used to determine the current year other post-retirement benefits obligation and following year's other post-retirement benefits expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high quality corporate bonds that generate sufficient cash flow to provide for the projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

Assumed Health Care Cost Trend Rate

	December 31,	
	2019	**2018**
Health care cost trend rate assumed for next year	**6.00%**	6.50%
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	**4.75%**	4.75%
Year that the rate reaches the ultimate trend rate	**2026**	2024

Expected Benefit Payments

The following table presents Duke Energy's expected benefit payments to participants on behalf of Duke Energy Kentucky in its qualified and other post-retirement benefit plans over the next 10 years. These benefit payments reflect expected future service, as appropriate.

(in thousands)	Qualified Plans	Other Post-Retirement Plans	Total
Years ending December 31,			
2020	$ 8,456	$ 927	$ 9,383
2021	8,965	731	9,696
2022	8,481	645	9,126
2023	8,179	597	8,776
2024	8,026	537	8,563
2025–2029	36,220	2,017	38,237

MASTER RETIREMENT TRUST

The assets for the Duke Energy Kentucky plans discussed above are derived from the Master Retirement Trust (Master Trust) that is held by Duke Energy and, as such, Duke Energy Kentucky is allocated its proportionate share of assets discussed below. Assets for both the qualified pension and other post-retirement benefits are maintained in the Master Trust. Duke Energy also invests other post-retirement assets in Voluntary Employees' Beneficiary Association trusts. The investment objective is to achieve sufficient returns, subject to a prudent level of portfolio risk, for the purpose of promoting the security of plan benefits for participants. As of December 31, 2019, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.85%. The expected long-term rate of return was developed using a weighted average calculation of expected returns based primarily on future expected returns across asset classes considering the use of active asset managers, where applicable. The asset allocation targets were set after considering the investment objective and the risk profile. Equity securities are held for their high expected return. Debt securities are primarily held to hedge the qualified pension plan liability. Real assets, return seeking fixed income, hedge funds and other global securities are held for diversification. Investments within asset classes are diversified to achieve broad market participation and reduce the impact of individual managers or investments.

Effective January 1, 2019, the target asset allocation for the Duke Energy Retirement Master Trust is 58% liability hedging assets and 42% return-seeking assets. Duke Energy periodically reviews its asset allocation targets, and over time, as the funded status of the benefit plans increase, the level of asset risk relative to plan liabilities may be reduced to better manage Duke Energy's benefit plan liabilities and reduce funded status volatility.

The following table presents target and actual asset allocations for the Master Trust at December 31, 2019, and 2018.

		Actual Allocation at December 31,	
Asset Category	**Target Allocation**	**2019**	**2018**
U.S. equity securities	—%	**—%**	11%
Global equity securities	28%	**27%**	18%
Global private equity securities	1%	**1%**	2%
Debt securities	58%	**57%**	63%
Return seeking debt securities	4%	**5%**	—%
Hedge funds	3%	**3%**	2%
Real estate and cash	6%	**7%**	2%
Other global securities	—%	**—%**	2%
Total	100%	**100%**	100%

EMPLOYEE SAVINGS PLAN

Duke Energy Kentucky also participates in employee savings plans sponsored by Duke Energy. Most employees participate in a matching contribution formula where Duke Energy provides a matching contribution generally equal to 100% of employee before-tax and Roth 401(k) contributions and, as applicable, after-tax contributions of up to 6% of eligible pay per period.

For new and rehired non-union and certain unionized employees who are not eligible to participate in Duke Energy's defined benefit plans, an additional employer contribution of 4% of eligible pay per pay period, which is subject to a three-year vesting schedule, is provided to the employee's savings plan account.

Duke Energy Kentucky's expense related to its proportionate share of pretax employer contributions and the additional 4% employer contribution was $1,150 thousand and $1,181 thousand for the years ended December 31, 2019, and 2018, respectively.

15. INCOME TAXES

Tax Act

On December 22, 2017, President Trump signed the Tax Act into law. Among other provisions, the Tax Act lowered the corporate federal income tax rate from 35% to 21%, limits interest deductions outside of regulated utility operations, requires the normalization of excess deferred taxes associated with property under the average rate assumption method as a prerequisite to qualifying for accelerated depreciation and repealed the federal manufacturing deduction.

On December 22, 2017, the SEC staff issued SAB 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, (SAB 118) which provides guidance on accounting for the Tax Act's impact. SAB 118 provides a measurement period, which in no case should extend beyond one year from the Tax Act enactment date, during which a company acting in good faith may complete the accounting for the impacts of the Tax Act under Accounting Standards Codification (ASC) Topic 740. In accordance with SAB 118, a company must reflect the income tax effects of the Tax Act in the reporting period in which the accounting under ASC Topic 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete, a company can determine a reasonable estimate for those effects and record a provisional estimate in the financial statements in the first reporting period in which a reasonable estimate can be determined.

As of December 31, 2018, the accounting for the effects of the Tax Act was complete. During the year ended December 31, 2018, Duke Energy Kentucky recorded the following measurement period adjustments in accordance with SAB 118:

- Additional tax expense of $2.4 million related to the completion of the analysis of Duke Energy Kentucky's existing regulatory liability related to deferred taxes.
- The majority of Duke Energy Kentucky's operations are regulated and it is expected that they will ultimately pass on the savings associated with the amount representing the remeasurement of deferred tax balances related to regulated operations to customers. For Duke Energy Kentucky's regulated operations, where the reduction is expected to be returned to customers in future rates, the remeasurement has been deferred as a regulatory liability. During 2018, Duke Energy Kentucky recorded an additional regulatory liability of $7.6 million, representing the revaluation of those deferred tax balances.

INCOME TAX EXPENSE

Components of Income Tax Expense (Benefit)

	Years Ended December 31,	
(in thousands)	**2019**	**2018**
Current income taxes		
Federal	**$ (2,208)**	$ (15,545)
State	**(161)**	(1,794)
Total current income taxes	**(2,369)**	(17,339)
Deferred income taxes		
Federal	**8,870**	26,832
State	**2,805**	4,059
Total deferred income taxes[(a)]	**11,675**	30,891
Investment tax credit amortization	**(61)**	(78)
Total income tax expense included in Statements of Operations	**$ 9,245**	$ 13,474

(a) Total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $2.2 million.

Statutory Rate Reconciliation

The following table presents a reconciliation of income tax expense at the U.S. federal statutory tax rate to actual tax expense.

(in thousands)	Years Ended December 31, 2019	2018
Income tax expense, computed at the statutory rate of 21%	$ 12,204	$ 13,289
State income tax, net of federal income tax effect	2,089	1,702
Amortization of excess deferred income tax	(4,191)	(2,626)
Tax Credits	(409)	(478)
Tax Act	—	2,381
Other items, net	(448)	(794)
Total income tax expense	$ 9,245	$ 13,474
Effective tax rate[(a)]	15.9%	21.3%

(a) The decrease in the effective tax rate was primarily due to an increase in the amortization of excess deferred taxes.

DEFERRED TAXES

Net Deferred Income Tax Liability Components

(in thousands)	Years Ended December 31, 2019	2018
Deferred credits and other liabilities	$ 139	$ 150
Lease obligations	2,281	—
Tax credits and NOL carryforwards	9,403	11,913
Pension, post-retirement and other employee benefits	5,326	4,491
Regulatory liabilities and deferred credits	7,640	9,655
Investments and other liabilities	655	824
Other	2,863	1,056
Total deferred income tax assets	28,307	28,089
Accelerated depreciation rates	(260,002)	(242,807)
Total deferred income tax liabilities	(260,002)	(242,807)
Net deferred income tax liabilities	$ (231,695)	$ (214,718)

The following table presents the expiration of tax credits and NOL carryforwards.

(in thousands)	December 31, 2019 Amount	Expiration Year
General business credits	$ 4,568	2024 — 2039
Federal NOL carryforwards[(a)]	4,699	Indefinite
Charitable contribution carryforwards	101	2021 — 2024
State NOL carryforwards	35	2037
Total tax credits and NOL carryforwards	$ 9,403	

(a) Indefinite carryforward for Federal NOLs generated in tax years beginning after December 31, 2017.

UNRECOGNIZED TAX BENEFITS

The following table presents changes to unrecognized tax benefits.

(in thousands)	Years Ended December 31, 2019	2018
Unrecognized tax benefits – January 1	$ 193	$ 143
Unrecognized tax benefit increases	212	50
Total changes	212	50
Unrecognized tax benefits – December 31	$ 405	$ 193

The following table includes additional information regarding the unrecognized tax benefits at December 31, 2019. Duke Energy Kentucky does not expect a decrease in unrecognized tax benefits within the next 12 months.

(in thousands)		December 31, 2019
Amount that if recognized, would affect the effective tax rate or regulatory liability[(a)]	$	405

(a) Duke Energy Kentucky is unable to estimate the specific amounts that would affect the effective tax rate versus the regulatory liability.

OTHER TAX MATTERS

Duke Energy Kentucky recognized no interest income, interest expense or penalties related to income taxes on the Statements of Operations in 2019, or 2018. As of December 31, 2019, and 2018, no amounts were recognized on the Balance Sheets for interest or penalties related to income taxes.

Duke Energy Kentucky is no longer subject to U.S. federal examination for years before 2016. With few exceptions, Duke Energy Kentucky is no longer subject to state, local or non-U.S. income tax examinations by tax authorities for years before 2016.

16. SUBSEQUENT EVENTS

For information on subsequent events related to regulatory matters, see Note 2.

Duke Energy Kentucky, Inc.
Financial Statements
and Independent Auditors' Report

December 31, 2020

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DUKE ENERGY KENTUCKY, INC.

December 31, 2020

GLOSSARY OF TERMS

Glossary of Terms

The following terms or acronyms used in this document are defined below:

Term or Acronym	Definition
AFUDC	Allowance for Funds Used During Construction
ARO	Asset Retirement Obligation
CRC	Cinergy Receivables Company, LLC
Duke Energy	Duke Energy Corporation
Duke Energy Kentucky	Duke Energy Kentucky, Inc.
EPA	U.S. Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FTR	Financial transmission right
GAAP	Generally Accepted Accounting Principles in the U.S.
KPSC	Kentucky Public Service Commission
NOL	Net operating loss
ROU assets	Right-of-use assets
U.S.	United States

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholder of Duke Energy Kentucky, Inc.

We have audited the accompanying financial statements of Duke Energy Kentucky, Inc. (the "Company"), which comprise the balance sheets as of December 31, 2020 and 2019, and the related statements of operations, changes in equity, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Duke Energy Kentucky, Inc. as of December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Charlotte, North Carolina
March 12, 2021

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF OPERATIONS

	Years Ended December 31,	
(in thousands)	2020	2019
Operating Revenues		
Electric	$ 353,478	$ 374,689
Natural gas	98,288	103,936
Total operating revenues	451,766	478,625
Operating Expenses		
Fuel used in electric generation and purchased power	101,192	123,672
Cost of natural gas	26,630	37,963
Operation, maintenance and other	146,816	148,105
Depreciation and amortization	79,218	79,277
Property and other taxes	17,022	16,089
Total operating expenses	370,878	405,106
Gains on Sales of Assets and Other, net	59	72
Operating Income	80,947	73,591
Other Income and Expenses, net	2,792	7,954
Interest Expense	25,888	23,430
Income Before Income Taxes	57,851	58,115
Income Tax Expense	9,708	9,245
Net Income	$ 48,143	$ 48,870

See Notes to Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY KENTUCKY, INC.
BALANCE SHEETS

	December 31,	
(in thousands, except share amounts)	**2020**	**2019**
ASSETS		
Current Assets		
Cash and cash equivalents	$ 4,297	$ 7,146
Receivables (net of allowance for doubtful accounts of $324 at 2020 and $314 at 2019)	8,333	6,659
Receivables from affiliated companies	23,032	26,116
Inventory	47,682	50,653
Regulatory assets	14,833	14,300
Other	8,490	9,254
Total current assets	106,667	114,128
Property, Plant and Equipment		
Cost	2,944,373	2,739,794
Accumulated depreciation and amortization	(1,030,627)	(991,145)
Net property, plant and equipment	1,913,746	1,748,649
Other Noncurrent Assets		
Regulatory assets	112,034	110,995
Operating lease right-of-use assets, net	8,786	9,152
Other	14,225	11,489
Total other noncurrent assets	135,045	131,636
Total Assets	$ 2,155,458	$ 1,994,413
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 41,162	$ 54,987
Accounts payable to affiliated companies	16,604	12,534
Notes payable to affiliated companies	75,472	82,509
Taxes accrued	20,620	16,336
Interest accrued	7,612	7,146
Current maturities of long-term debt	50,000	—
Asset retirement obligations	3,213	1,428
Regulatory liabilities	11,389	16,112
Other	16,956	20,338
Total current liabilities	243,028	211,390
Long-Term Debt	653,796	633,807
Long-Term Debt Payable to Affiliated Companies	25,000	25,000
Other Noncurrent Liabilities		
Deferred income taxes	242,372	231,695
Asset retirement obligations	72,899	48,352
Regulatory liabilities	134,574	137,624
Operating lease liabilities	8,696	8,989
Accrued pension and other post-retirement benefit costs	31,431	28,360
Other	25,426	24,103
Total other noncurrent liabilities	515,398	479,123
Commitments and Contingencies		
Equity		
Common stock, $15.00 par value, 1,000,000 shares authorized and 585,333 shares outstanding	8,780	8,780
Additional paid-in capital	242,494	217,494
Retained earnings	466,962	418,819
Total equity	718,236	645,093
Total Liabilities and Equity	$ 2,155,458	$ 1,994,413

See Notes to Financial Statements

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF CASH FLOWS

	Years Ended December 31,	
(in thousands)	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	$ 48,143	$ 48,870
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	79,783	79,871
Equity component of AFUDC	125	(2,505)
(Gains) Losses on sales of other assets	(59)	(72)
Deferred income taxes	4,666	11,613
Payments for asset retirement obligations	(1,685)	(7,728)
(Increase) decrease in:		
Receivables	(1,916)	4,639
Receivables from affiliated companies	8,086	3,078
Inventory	2,971	(10,057)
Other current assets	(584)	(4,124)
Increase (decrease) in:		
Accounts payable	6,583	(3,691)
Accounts payable to affiliated companies	4,070	(4,969)
Taxes accrued	4,688	(1,807)
Other current liabilities	(1,084)	2,661
Other assets	(3,806)	(2,664)
Other liabilities	(3,829)	(898)
Net cash provided by operating activities	146,152	112,217
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	(226,190)	(248,601)
Notes receivable from affiliated companies	(5,002)	—
Other	(5,370)	(16,621)
Net cash used in investing activities	(236,562)	(265,222)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	69,745	209,006
Payments for the redemption of long-term debt	—	(100,169)
Notes payable to affiliated companies	(7,037)	43,634
Capital contributions from parent	25,000	—
Other	(147)	(93)
Net cash provided by financing activities	87,561	152,378
Net decrease in cash and cash equivalents	(2,849)	(627)
Cash and cash equivalents at beginning of period	7,146	7,773
Cash and cash equivalents at end of period	$ 4,297	$ 7,146
Supplemental Disclosures:		
Cash paid for interest, net of amount capitalized	$ 24,857	$ 21,805
Cash paid for income taxes	1,822	273
Significant non-cash transactions:		
Accrued capital expenditures	24,547	43,879

See Notes to Financial Statements

FINANCIAL STATEMENTS

DUKE ENERGY KENTUCKY, INC.
STATEMENTS OF CHANGES IN EQUITY

(in thousands)	Common Stock	Additional Paid-in Capital	Retained Earnings	Total Equity
Balance at December 31, 2018	$ 8,780	$ 217,494	$ 369,949	$ 596,223
Net income	—	—	48,870	48,870
Balance at December 31, 2019	$ 8,780	$ 217,494	$ 418,819	$ 645,093
Net income	**—**	**—**	**48,143**	**48,143**
Contribution from parent	**—**	**25,000**	**—**	**25,000**
Balance at December 31, 2020	**$ 8,780**	**$ 242,494**	**$ 466,962**	**$ 718,236**

See Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS AND BASIS OF PRESENTATION

Duke Energy Kentucky is a combination electric and natural gas regulated public utility company that provides service in northern Kentucky. Duke Energy Kentucky's principal lines of business include generation, transmission, distribution and sale of electricity, as well as the transportation and sale of natural gas. Duke Energy Kentucky is subject to the regulatory provisions of the KPSC and the FERC. Duke Energy Kentucky's common stock is wholly owned by Duke Energy Ohio, Inc., an indirect wholly owned subsidiary of Duke Energy.

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

COVID-19

The COVID-19 pandemic is having a significant impact on global health and economic environments. In March 2020, the World Health Organization declared COVID-19 a global pandemic, and the federal government proclaimed that the COVID-19 outbreak in the United States constitutes a national emergency. Duke Energy Kentucky is monitoring developments closely and responding appropriately. See Notes 2, 12 and 13 for additional information as well as steps taken to mitigate the impacts to our business and customers from the COVID-19 pandemic.

Other Current Assets and Liabilities

Duke Energy Kentucky does not have any amounts included in Other within Current Assets or Current Liabilities that exceed 5% of total Current Assets or Current Liabilities on the Balance Sheets at either December 31, 2020, or 2019.

SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

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

Regulatory Accounting

The majority of Duke Energy Kentucky's operations are subject to price regulation for the sale of electricity and natural gas by the KPSC or FERC. When prices are set on the basis of specific costs of the regulated operations and an effective franchise is in place such that sufficient natural gas or electric services can be sold to recover those costs, Duke Energy Kentucky applies regulatory accounting. Regulatory accounting changes the timing of the recognition of costs or revenues relative to a company that does not apply regulatory accounting. As a result, regulatory assets and regulatory liabilities are recognized on the Balance Sheets and are amortized consistent with the treatment of the related cost in the ratemaking process. Regulatory assets are reviewed for recoverability each reporting period. If a regulatory asset is no longer deemed probable of recovery, the deferred cost is charged to earnings. See Note 2 for further information.

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

Cash and Cash Equivalents

All highly liquid investments with maturities of three months or less at the date of acquisition are considered cash equivalents.

Inventory

Inventory related to regulated operations is valued at historical cost. Inventory is charged to expense or capitalized to property, plant and equipment when issued, primarily using the average cost method. Excess or obsolete inventory is written-down to the lower of cost or net realizable value. Once inventory has been written-down, it creates a new cost basis for the inventory that is not subsequently written-up. Provisions for inventory write-offs were not material at December 31, 2020, and 2019. The components of inventory are presented in the table below.

	December 31,	
(in thousands)	2020	2019
Materials and supplies	$ 17,661	$ 19,017
Coal	16,052	14,982
Natural gas, oil and other	13,969	16,654
Total inventory	$ 47,682	$ 50,653

Long-Lived Asset Impairments

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

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

Property, Plant and Equipment

Property, plant and equipment are stated at the lower of depreciated historical cost net of any disallowances or fair value, if impaired. Duke Energy Kentucky capitalizes all construction-related direct labor and material costs, as well as indirect construction costs such as general engineering, taxes and financing costs. See "Allowance for Funds Used During Construction and Interest Capitalized" below for information on capitalized financing costs. Costs of renewals and betterments that extend the useful life of property, plant and equipment are also capitalized. The cost of repairs, replacements and major maintenance projects, which do not extend the useful life or increase the expected output of the asset, are expensed as incurred. Depreciation is generally computed over the estimated useful life of the asset using the composite straight-line method. Depreciation studies are conducted periodically to update composite rates and are approved by the KPSC and/or the FERC when required. The composite weighted average depreciation rate was 2.4% and 2.6% for the years ended December 31, 2020, and 2019, respectively.

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

When Duke Energy Kentucky sells entire regulated operating units, the original cost and accumulated depreciation and amortization balances are removed from Property, Plant and Equipment on the Balance Sheets. Any gain or loss is recorded in earnings, unless otherwise required by the KPSC and/or the FERC. See Note 7 for further information.

Leases

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

Operating leases are included in Operating lease ROU assets, net, Other current liabilities and Operating lease liabilities on the Balance Sheets.

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

Allowance for Funds Used During Construction and Interest Capitalized

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

AFUDC equity, a permanent difference for income taxes, reduces the effective tax rate when capitalized and increases the effective tax rate when depreciated or amortized. See Note 15 for additional information.

Asset Retirement Obligations

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

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

Obligations for closure of ash basins are based upon discounted cash flows of estimated costs for site-specific plans, if known, or probability weightings of the potential closure methods if the closure plans are under development and multiple closure options are being considered and evaluated on a site-by-site basis. See Note 6 for further information.

Accounts Payable

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

Suppliers invoices sold to the financial institution under the program totaled $1.8 million for the year ended December 31, 2020, for Duke Energy Kentucky. All activity related to amounts due to suppliers who elected to participate in the program are included within Net cash provided by operating activities on the Statements of Cash Flows.

Revenue Recognition

Duke Energy Kentucky recognizes revenue as customers obtain control of promised goods and services in an amount that reflects consideration expected in exchange for those goods or services. Generally, the delivery of electricity and natural gas results in the transfer of control to customers at the time the commodity is delivered and the amount of revenue recognized is equal to the amount billed to each customer, including estimated volumes delivered when billings have not yet occurred. See Note 13 for further information.

Derivatives and Hedging

Derivative instruments may be used in connection with commodity price and interest rate activities, including swaps, futures, forwards and options. All derivative instruments, except those that qualify for the normal purchase/normal sale exception, are recorded on the Balance Sheets at fair value. For activity subject to regulatory accounting, gains and losses on derivative contracts are reflected as regulatory assets or regulatory liabilities and not as other comprehensive income or current period income. As a result, changes in fair value of these derivatives have no immediate earnings impact. See Note 10 for further information.

Unamortized Debt Premium, Discount and Expense

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

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

Loss Contingencies and Environmental Liabilities

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

Environmental liabilities are recorded on an undiscounted basis when environmental remediation or other liabilities become probable and can be reasonably estimated. Environmental expenditures related to past operations that do not generate current or future revenues are expensed. Environmental expenditures related to operations that generate current or future revenues are expensed or capitalized, as appropriate. Certain environmental expenditures receive regulatory accounting treatment and are recorded as regulatory assets. See Notes 2 and 3 for further information.

Pension and Other Post-Retirement Benefit Plans

Duke Energy maintains qualified, non-qualified and other post-retirement benefit plans. Eligible employees of Duke Energy Kentucky participate in the respective qualified, non-qualified and other post-retirement benefit plans and Duke Energy Kentucky is allocated its proportionate share of benefit costs. See Note 14 for further information, including significant accounting policies associated with these plans.

Income Taxes

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

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

Tax-related interest and penalties are recorded in Interest Expense and Other Income and Expenses, net, in the Statements of Operations. See Note 15 for further information.

Dividend Restrictions

Duke Energy Kentucky is required to pay dividends solely out of retained earnings and to maintain a minimum of 35% equity in its capital structure.

New Accounting Standards

The following new accounting standard was adopted by Duke Energy Kentucky in 2020.

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

Duke Energy Kentucky recognizes allowances for credit losses based on management's estimate of losses expected to be incurred over the lives of certain assets. Management monitors credit quality, changes in expected credit losses and the appropriateness of the allowance for credit losses on a forward-looking basis. Management reviews the risk of loss periodically as part of the existing assessment of collectability of receivables. See Note 13 for additional information.

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

The adoption of the accounting guidance for credit losses did not have a material impact on the Statements of Operations, Balance Sheets or Statements of Cash Flows for Duke Energy Kentucky. Therefore, no material adjustments were recorded as of the adoption date of January 1, 2020.

The following new accounting standard has been issued but not yet adopted by Duke Energy Kentucky as of December 31, 2020.

Reference Rate Reform. In March 2020, the FASB issued new accounting guidance for reference rate reform. This guidance is elective and provides expedients to facilitate financial reporting for the anticipated transition away from the London Inter-bank Offered Rate (LIBOR) and other interbank reference rates by the end of 2021. The optional expedients are effective for modification of existing contracts or new arrangements executed between March 12, 2020, through December 31, 2022.

Duke Energy Kentucky has variable-rate debt and manages interest rate risk by entering into financial contracts including interest rate swaps that are generally indexed to LIBOR. Impacted financial arrangements extending beyond 2021 may require contractual amendment or termination to fully adapt to a post-LIBOR environment. Duke Energy Kentucky is assessing these financial arrangements and is evaluating the use of optional expedients outlined in the new accounting guidance. Alternative index provisions are also being assessed and incorporated into new financial arrangements that extend beyond 2021. The full outcome of the transition away from LIBOR cannot be determined at this time, but it is not expected to have a material impact on the financial statements.

Subsequent Events

Subsequent events were evaluated through March 12, 2021, and none were identified.

2. REGULATORY MATTERS

REGULATORY ASSETS AND LIABILITIES

Duke Energy Kentucky records regulatory assets and liabilities that result from the ratemaking process. See Note 1 for further information.

The following table represents the regulatory assets and liabilities on the Balance Sheets.

(in thousands)	December 31, 2020	December 31, 2019	Earns/Pays a Return	Recovery/ Refund Period Ends
Regulatory Assets[(a)]				
East Bend deferrals	$ 40,199	43,834	X	(c)
Accrued pension and other post-retirement benefits	35,714	36,398		(b)
AROs – coal ash	22,208	15,983	X	(c)(g)
Hedge costs and other deferrals	5,874	4,894		(e)
East Bend outage normalization	4,438	3,854		(c)
Advanced Metering Infrastructure	3,867	4,266		2033
Storm cost deferrals	3,203	4,326		(c)
Deferred gas integrity costs	2,468	2,711	X	2029
Carbon management research grant	1,467	1,667		2028
Vacation accrual	1,324	1,354		2021
Demand side management/Energy efficiency costs	1,300	—		(c)(d)
Deferred debt expense	517	689		2036
Deferred fuel and purchased gas costs	—	1,423		(d)(g)2020
Other	4,288	3,896		(c)(d)
Total regulatory assets	126,867	125,295		
Less: current portion	14,833	14,300		
Total noncurrent regulatory assets	$ 112,034	$ 110,995		
Regulatory Liabilities[(a)]				
Net regulatory liability related to income taxes	$ 124,395	130,324		(c)
Costs of removal	7,439	7,894		(f)
Accrued pension and other post-retirement benefits	6,041	5,329		(b)
Deferred fuel and purchased gas costs	3,775	4,317		2021
Demand side management/Energy efficiency costs	1,004	4,317		(c)(d)
Profit sharing mechanism	826	—		2021
Provision for rate refunds	421	582		2024
Hedge costs and other deferrals	159	657		(e)
Other	1,903	316		(c)
Total regulatory liabilities	145,963	153,736		
Less: current portion	11,389	16,112		
Total noncurrent regulatory liabilities	$ 134,574	$ 137,624		

(a) Regulatory assets and liabilities are excluded from rate base unless otherwise noted.
(b) Recovered primarily over the average remaining service periods or life expectancies of employees covered by the benefit plans. See Note 14 for further information.
(c) The expected recovery or refund period varies or has not been determined.
(d) Deferred costs are recovered through a rider mechanism.
(e) Amounts relate to unrealized gains and losses on derivatives recorded as a regulatory asset or liability, respectively, until the contracts are settled.
(f) Represents funds received from customers to cover future removal of property, plant and equipment from retired or abandoned sites as property is retired. Included in rate base and recovered over the life of associated assets.
(g) Certain amounts are recovered through rates.

RATE RELATED INFORMATION

The KPSC approves rates for retail electric and natural gas services within the Commonwealth of Kentucky. The FERC approves rates for electric sales to wholesale customers served under cost-based rates, as well as sales of transmission service.

Duke Energy Kentucky COVID-19

In response to the COVID-19 pandemic, on March 6, 2020, Governor Andy Beshear declared a state of emergency in the commonwealth of Kentucky. The KPSC issued an order directing utilities to cease disconnections for nonpayment and waive late payment fees. The KPSC also directed utilities to maintain flexible payment plans and tariff interpretations to assist customers during this crisis and to seek any regulatory waivers, if necessary. In response, Duke Energy Kentucky ceased all disconnections except for safety-related concerns and waived late payment and reconnection fees. On September 21, 2020, the KPSC issued an order ending the disconnection moratorium for residential and nonresidential customers effective no earlier than October 20, 2020. Utilities are required to offer residential customers a default payment plan for any arrearages accumulated through the October 2020 billing cycle. Assessment of late payment charges for nonresidential customers resumed beginning October 20, 2020, and resumed for residential customers after December 31, 2020. Duke Energy Kentucky is following the order, as clarified on September 30, 2020, by the KPSC.

Duke Energy Kentucky Electric Base Rate Case

On September 3, 2019, Duke Energy Kentucky filed a rate case with the KPSC requesting an increase in electric base rates of approximately $46 million. On January 31, 2020, Duke Energy Kentucky filed rebuttal testimony updating its rate increase request to approximately $44 million. Hearings concluded on February 20, 2020, and briefing was completed March 20, 2020. On April 27, 2020, the KPSC issued its decision approving a $24 million increase for Duke Energy Kentucky with a 9.25% return on equity. The KPSC denied Duke Energy Kentucky's major storm deferral mechanism and EV and battery storage pilots. The KPSC approved Duke Energy Kentucky's Green Source Advantage tariff. New customer rates were effective on May 1, 2020. On May 18, 2020, Duke Energy Kentucky filed its motion for rehearing and on June 4, 2020, the motion was granted in part and denied in part by the KPSC. On October 16, 2020, the KPSC issued an Order on Rehearing authorizing an additional $4 million increase in revenue requirement bringing the total authorized revenue requirement increase to $28 million. Revised customer rates took effect in November 2020. The case has been resolved.

Regional Transmission Organization Realignment

Duke Energy Kentucky transferred control of its transmission assets to effect a Regional Transmission Organization (RTO) realignment from Midcontinent Independent System Operator, Inc. (MISO) to PJM Interconnection, LLC (PJM), effective December 31, 2011.

On December 22, 2010, the KPSC approved Duke Energy Kentucky's request to effect the RTO realignment, subject to a commitment not to seek double-recovery in a future rate case of the transmission expansion fees that may be charged by MISO and PJM in the same period or overlapping periods. Duke Energy Kentucky is currently recovering PJM transmission expansion fees through current base rates.

Upon its exit from MISO on December 31, 2011, Duke Energy Kentucky recorded a liability and expense for its exit obligation and share of MISO Transmission Expansion Planning costs, excluding Multi Value Projects. This liability was recorded within Other in Current Liabilities and Other in Noncurrent Liabilities on the Balance Sheets.

The following table provides a reconciliation of the beginning and ending balance of recorded obligations related to the withdrawal from MISO.

(in thousands)	December 31, 2019	Provision / Adjustments	Cash Reductions	December 31, 2020
MISO withdrawal liability	$ 13,924	$ 359	$ (751)	$ 13,532

3. COMMITMENTS AND CONTINGENCIES

GENERAL INSURANCE

Duke Energy Kentucky has insurance and/or reinsurance coverage either directly or through indemnification from Duke Energy's captive insurance company, Bison Insurance Company Limited, and its affiliates, consistent with companies engaged in similar commercial operations with similar type properties. Duke Energy Kentucky's coverage includes (i) commercial general liability coverage for liabilities arising to third parties for bodily injury and property damage; (ii) workers' compensation; (iii) automobile liability coverage; and (iv) property coverage for all real and personal property damage. Real and personal property damage coverage excludes electric transmission and distribution lines, but includes damages arising from boiler and machinery breakdowns, earthquakes, flood damage and extra expense, but not outage or replacement power coverage. All coverage is subject to certain deductibles or retentions, sublimits, exclusions, terms and conditions common for companies with similar types of operations. Duke Energy Kentucky self-insures its electric transmission and distribution lines against loss due to storm damage and other natural disasters.

The cost of Duke Energy Kentucky's coverage can fluctuate year to year reflecting claims history and conditions of the insurance and reinsurance markets.

In the event of a loss, terms and amounts of insurance and reinsurance available might not be adequate to cover claims and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material effect on Duke Energy Kentucky's results of operations, cash flows or financial position. Duke Energy Kentucky is responsible to the extent losses may be excluded or exceed limits of the coverage available.

ENVIRONMENTAL

Duke Energy Kentucky is subject to federal, state and local regulations regarding air and water quality, hazardous and solid waste disposal, coal ash and other environmental matters. These regulations can be changed from time to time, imposing new obligations on Duke Energy Kentucky.

On November 16, 2016, the state of Maryland filed a petition with EPA under Section 126 of the Clean Air Act alleging that 19 power plants, including one unit owned and operated by Duke Energy Kentucky, contribute to violations of EPA's National Ambient Air Quality Standards (NAAQS) for ozone in the state of Maryland. On March 12, 2018, the state of New York filed a petition with EPA, also under Section 126 of the Clean Air Act alleging that over 60 power plants, including one unit owned and operated by Duke Energy Kentucky, contribute to violations of EPA's ozone NAAQS in the state of New York. Both Maryland and New York sought EPA orders requiring the states in which the named power plants operate impose more stringent Nitrogen oxide (NO_x) emission limitations on the plants. On October 5, 2018, EPA denied the Maryland petition. That same day, Maryland appealed EPA's denial. On October 18, 2019, EPA denied the New York petition, and New York appealed that decision on October 29, 2019. On May 19, 2020, the U.S. Court of Appeals for the D.C. Circuit issued its decision, finding, with one exception, that EPA reasonably denied the Maryland petition. The court remanded one issue to EPA regarding target sources lacking catalytic controls. The Duke Energy Kentucky unit targeted has selective catalytic reduction, so the decision is favorable. A different panel of the same court heard oral argument in New York's appeal of EPA's denial of its Section 126 Petition on May 7, 2020, and on July 14, 2020, the panel issued its decision remanding the petition to EPA for further review. Duke Energy Kentucky cannot predict the outcome of this matter.

Remediation Activities

In addition to the AROs discussed in Note 6, Duke Energy Kentucky is responsible for environmental remediation at various sites. These include certain properties that are part of ongoing operations and sites formerly owned or used by Duke Energy Kentucky. These sites are in various stages of investigation, remediation and monitoring. Managed in conjunction with relevant federal, state and local agencies, remediation activities vary based upon site condition and location, remediation requirements, complexity and sharing of responsibility. If remediation activities involve joint and several liability provisions, strict liability, or cost recovery or contribution actions, Duke Energy Kentucky could potentially be held responsible for environmental impacts caused by other potentially responsible parties, and may also benefit from insurance policies or contractual indemnities that cover some or all cleanup costs. Liabilities are recorded when losses become probable and are reasonably estimable. The total costs that may be incurred cannot be estimated because the extent of environmental impact, allocation among potentially responsible parties, remediation alternatives and/or regulatory decisions have not yet been determined. Additional costs associated with remediation activities are likely to be incurred in the future and could be significant. Costs are typically expensed as Operation, maintenance and other on the Statements of Operations unless regulatory recovery of the costs is deemed probable.

Duke Energy Kentucky has accrued approximately $668 thousand and $670 thousand of probable and estimable costs related to its various environmental sites in Other within Other Noncurrent Liabilities on the Balance Sheets as of December 31, 2020, and 2019, respectively. Additional losses in excess of recorded reserves are expected to be immaterial for the stages of investigation, remediation and monitoring for the environmental sites that have been evaluated. The maximum amount of the range for all stages of Duke Energy Kentucky's environmental sites cannot be determined at this time.

LITIGATION

Duke Energy Kentucky is involved in other legal, tax and regulatory proceedings arising in the ordinary course of business, some of which involve significant amounts. Duke Energy Kentucky believes the final disposition of these proceedings will not have a material effect on its results of operations, cash flows or financial position. Duke Energy Kentucky expenses legal costs related to the defense of loss contingencies as incurred.

OTHER COMMITMENTS AND CONTINGENCIES

General

As part of its normal business, Duke Energy Kentucky is party to various financial guarantees, performance guarantees and other contractual commitments to extend guarantees of credit and other assistance to various third parties. These guarantees involve elements of performance and credit risk, which are not included on the Balance Sheets. The possibility of Duke Energy Kentucky having to honor its contingencies is largely dependent upon future operations of various third parties or the occurrence of certain future events.

Purchase Obligations

Pipeline and Storage Capacity Contracts

Duke Energy Kentucky enters into pipeline and storage capacity contracts that commit future cash flows to acquire services needed in its business. Costs arising from capacity commitments are recovered via the Gas Cost Adjustment Clause in Kentucky. The time period for fixed payments under these pipeline and storage capacity contracts is up to six years.

Certain storage and pipeline capacity contracts require the payment of demand charges that are based on rates approved by the FERC in order to maintain rights to access the natural gas storage or pipeline capacity on a firm basis during the contract term. The demand charges that are incurred in each period are recognized in the Statements of Operations as part of natural gas purchases and are included in Cost of natural gas.

The following table presents future unconditional purchase obligations under these contracts.

(in thousands)	December 31, 2020
2021	$ 7,181
2022	2,842
2023	1,610
2024	1,414
2025	587
Thereafter	394
Total	$ 14,028

4. LEASES

As part of its operations, Duke Energy Kentucky leases space on communication towers, meters and office space under various terms and expiration dates. Certain Duke Energy Kentucky lease agreements include options for renewal and early termination. The intent to renew a lease varies depending on the lease type and asset. Renewal options that are reasonably certain to be exercised are included in the lease measurements. The decision to terminate a lease early is dependent on various economic factors. No termination options have been included in any of the lease measurements.

Duke Energy Kentucky has certain lease agreements, which include variable lease payments that are based on the usage of an asset. These variable lease payments are not included in the measurement of the ROU assets or operating lease liabilities on the Balance Sheets.

The following table presents the components of lease expense.

	Years Ended December 31,	
(in thousands)	2020	2019
Operating lease expense[(a)]	$ 1,846	$ 1,961
Short-term lease expense[(a)]	—	709
Variable lease expense[(a)]	66	108
Finance lease expense		
Amortization of leased assets[(b)]	—	169
Interest on lease liabilities[(c)]	—	2
Total finance lease expense	—	171
Total lease expense	$ 1,912	$ 2,949

(a) Included in Operations, maintenance and other on the Statements of Operations.
(b) Included in Depreciation and amortization on the Statements of Operations.
(c) Included in Interest Expense on the Statements of Operations.

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

(in thousands)	December 31, 2020
2021	$ 676
2022	688
2023	700
2024	712
2025	725
Thereafter	9,366
Total operating lease payments	12,867
Less: present value discount	(3,878)
Total operating lease liabilities[(a)]	$ 8,989

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

There were no finance lease liabilities as of December 31, 2020, or 2019.

The following tables contain additional information related to leases.

		December 31,	
(in thousands)	Classification	2020	2019
Assets			
Operating	Operating lease ROU assets, net	$ 8,786	$ 9,151
Total lease assets		$ 8,786	$ 9,151
Liabilities			
Current			
Operating	Other current liabilities	$ 293	$ 270
Noncurrent			
Operating	Operating lease liabilities	8,696	8,989
Total lease liabilities		$ 8,989	$ 9,259

	Years ended December 31,	
(in thousands)	2020	2019
Cash paid for amounts included in the measurement of lease liabilities[(a)]		
Operating cash flows from operating leases	$ 665	$ 714
Operating cash flows from finance leases	—	2
Financing cash flows from finance leases	—	169

(a) No amounts were classified as investing cash flows from operating leases for the years ended December 31, 2020, and 2019.

	December 31,	
	2020	2019
Weighted-average remaining lease term (years)		
Operating leases	17	18
Weighted-average discount rate(a)		
Operating leases	4.4 %	4.4 %

(a) The discount rate is calculated using the rate implicit in a lease if it is readily determinable. Generally, the rate used by the lessor is not provided to Duke Energy Kentucky and in these cases the incremental borrowing rate is used. Duke Energy Kentucky will typically use its fully collateralized incremental borrowing rate as of the commencement date to calculate and record the lease. The incremental borrowing rate is influenced by the lessee's credit rating and lease term and as such may differ for individual leases, embedded leases or portfolios of leased assets.

5. DEBT AND CREDIT FACILITIES

SUMMARY OF DEBT AND RELATED TERMS

The following table summarizes outstanding debt.

(in thousands)	Weighted Average Interest Rate	Year Due	December 31, 2020	December 31, 2019
Unsecured debt	4.01 %	2023 - 2057	$ 630,000	$ 560,000
Tax-exempt bonds[(a)(b)]	0.75 %	2027	76,720	76,720
Money pool borrowings[(b)(c)]	0.41 %	2025	100,472	107,510
Unamortized debt discount and premium, net			(186)	(199)
Unamortized debt issuance costs			(2,738)	(2,715)
Total debt	3.25 %		$ 804,268	$ 741,316
Short-term money pool borrowings			(75,472)	(82,509)
Current maturities of long-term debt[(d)]			(50,000)	—
Total long-term debt			$ 678,796	$ 658,807

(a) Includes $27 million that is secured by a bilateral letter of credit agreement at December 31, 2020, and 2019.
(b) Floating-rate debt. At December 31, 2019, the weighted average interest rate was 2.16% and 1.89% for tax-exempt bonds and money pool borrowings, respectively.
(c) Includes $25 million classified as Long-Term Debt Payable to Affiliated Companies on the Balance Sheets at December 31, 2020, and 2019.
(d) Amount classified as Current maturities of long-term debt include a mandatory put option to Duke Energy Kentucky in November 2021.

MATURITIES AND CALL OPTIONS

The following table shows the annual maturities of long-term debt for the next five years and thereafter. Amounts presented exclude short-term notes payable.

(in thousands)	December 31, 2020
2021	$ 50,000
2022	—
2023	25,000
2024	—
2025	120,000
Thereafter	536,720
Total long-term debt, including current maturities	$ 731,720

Duke Energy Kentucky has the ability under certain debt facilities to call and repay the obligation prior to its scheduled maturity. Therefore, the actual timing of future cash repayments could be materially different than as presented above.

SHORT-TERM OBLIGATIONS CLASSIFIED AS LONG-TERM DEBT

Certain tax-exempt bonds that may be put to Duke Energy Kentucky at the option of the holder and money pool borrowings, which are short-term obligations by nature, are classified as long-term due to Duke Energy Kentucky's intent and ability to utilize such borrowings as long-term financing. As Duke Energy's Master Credit Facility and Duke Energy Kentucky's other bilateral letter of credit agreements have non-cancelable terms in excess of one year as of the balance sheet date, Duke Energy Kentucky has the ability to refinance these short-term obligations on a long-term basis. See "Available Credit Facilities" below for additional information.

At December 31, 2020, and 2019, $27 million of tax-exempt bonds and $25 million of money pool borrowings were classified as Long-Term Debt and Long-Term Debt Payable to Affiliated Companies, respectively, on the Balance Sheets.

SUMMARY OF SIGNIFICANT DEBT ISSUANCES

In 2020, Duke Energy Kentucky issued $70 million of unsecured debt, of which $35 million carry a fixed interest rate of 2.65% and mature September 2030, and $35 million carry a fixed interest rate of 3.66% and mature September 2050. The proceeds were used to pay down short-term debt and for general corporate purposes.

In 2019, Duke Energy Kentucky issued $210 million of unsecured debentures, of which $95 million carry a fixed interest rate of 3.23% and mature October 2025, $75 million carry a fixed interest rate of 3.56% and mature October 2029 and $40 million carry a fixed interest rate of 4.32% and mature July 2049. The $40 million tranche closed and funded in July 2019, and the remaining tranches closed in September 2019. The proceeds were used to refinance Duke Energy Kentucky's $100 million, 4.65% debentures, which matured in October 2019, to pay down short-term intercompany debt and for general corporate purposes.

AVAILABLE CREDIT FACILITIES

In March 2020, Duke Energy amended its existing $8 billion Master Credit Facility to extend the termination date to March 2025. Duke Energy Kentucky has borrowing capacity under the Master Credit Facility up to a specified sublimit. Duke Energy has the unilateral ability at any time to increase or decrease Duke Energy Kentucky's borrowing sublimit, subject to a maximum sublimit. The amount available to Duke Energy Kentucky under the Master Credit Facility may be reduced to backstop issuances of commercial paper, certain letters of credit and variable-rate demand tax-exempt bonds that may be put to Duke Energy Kentucky at the option of the holder. At December 31, 2020, Duke Energy Kentucky had a borrowing sublimit of $175 million and available capacity of $75 million under the Master Credit Facility.

Duke Energy Kentucky and Duke Energy Indiana, LLC, a wholly owned subsidiary of Duke Energy, collectively have a $156 million bilateral letter of credit agreement. In February 2018, the bilateral letter of credit agreement was amended to extend the termination date from February 2019 to February 2023. Duke Energy Kentucky may request the issuance of letters of credit up to $27 million on its behalf to support various series of tax-exempt bonds. This credit facility may not be used for any purpose other than to support the tax-exempt bonds.

OTHER DEBT MATTERS

Money Pool

Duke Energy Kentucky receives support for its short-term borrowing needs through participation with Duke Energy and certain of its subsidiaries in a money pool arrangement. Under this arrangement, those companies with short-term funds may provide short-term loans to affiliates participating under this arrangement. The money pool is structured such that Duke Energy Kentucky separately manages its cash needs and working capital requirements. Accordingly, there is no net settlement of receivables and payables between money pool participants. Duke Energy may loan funds to its participating subsidiaries, but may not borrow funds through the money pool.

Money pool receivable balances are reflected within Notes receivable from affiliated companies on the Balance Sheets. Money pool payable balances are reflected within either Notes payable to affiliated companies or Long-Term Debt Payable to Affiliated Companies on the Balance Sheets.

Restrictive Debt Covenants

Duke Energy Kentucky's debt and credit agreements contain various financial and other covenants. Duke Energy's Master Credit Facility contains a covenant requiring the debt-to-total capitalization ratio not to exceed 65% for each borrower. Failure to meet those covenants beyond applicable grace periods could result in accelerated due dates and/or termination of the agreements. As of December 31, 2020, Duke Energy Kentucky was in compliance with all covenants related to its debt agreements. In addition, some credit agreements may allow for acceleration of payments or termination of the agreements due to nonpayment, or acceleration of other significant indebtedness of the borrower or some of its subsidiaries. None of the debt or credit agreements contain material adverse change clauses.

6. ASSET RETIREMENT OBLIGATIONS

Duke Energy Kentucky records an ARO when it has a legal obligation to incur retirement costs associated with the retirement of a long-lived asset and the obligation can be reasonably estimated. Certain assets have an indeterminate life, and thus the fair value of the retirement obligation is not reasonably estimable. A liability for these AROs will be recorded when a fair value is determinable.

Duke Energy Kentucky's regulated electric and regulated natural gas operations accrue costs of removal for property that does not have an associated legal retirement obligation based on regulatory orders from the KPSC. These costs of removal are recorded as a regulatory liability in accordance with regulatory accounting treatment. See Note 2 for the estimated cost of removal for assets without an associated legal retirement obligation, which are included in Regulatory liabilities on the Balance Sheets as of December 31, 2020, and 2019.

Duke Energy Kentucky is subject to state and federal regulations covering the closure of coal ash impoundments, including the EPA Coal Combustion Residuals (CCR) Rule. AROs recorded on the Balance Sheets include the legal obligation for the disposal of CCR, which is based upon estimated closure costs for impacted ash impoundments. The amount recorded represents the discounted cash flows for estimated closure costs based upon specific closure plans. Actual costs to be incurred will be dependent upon factors that vary from site to site. The most significant factors are the method and time frame of closure at the individual sites. Closure methods considered include removing the water from ash basins, consolidating material as necessary and capping the ash with a synthetic barrier, excavating and relocating the ash to a lined structural fill or lined landfill or recycling the ash for concrete or some other beneficial use. The ultimate method and timetable for closure will be in compliance with standards set by federal and state regulations and other agreements. The ARO amount will be adjusted as additional information is gained through the closure and post-closure process, including acceptance and approval of compliance approaches, which may change management assumptions, and may result in a material change to the balance. Asset retirement costs associated with coal ash AROs at the East Bend Station are included within Property, Plant and Equipment on the Balance Sheets.

In addition to the coal ash AROs, Duke Energy Kentucky also has legal obligations related to the retirement of gas mains and asbestos remediation.

The following table presents the changes in the liability associated with AROs.

	Years Ended December 31,	
(in thousands)	2020	2019
Balance at beginning of period	$ 49,780	$ 62,826
Accretion expense[(a)]	1,898	2,301
Liabilities settled[(b)]	(1,949)	(12,098)
Revisions to estimates of cash flows[(c)]	26,383	(3,249)
Balance at end of period	$ 76,112	$ 49,780

(a) All accretion expense for the years ended December 31, 2020, and 2019, relates to Duke Energy Kentucky's regulated operations and has been deferred in accordance with regulatory accounting treatment.

(b) Amounts primarily relate to ash basin closure costs at the East Bend Station and completion of asbestos remediation in 2019 at Miami Fort 6.

(c) Amounts primarily relate to changes in routine maintenance and landfill closure cost estimates for ash impoundments.

7. PROPERTY, PLANT AND EQUIPMENT

The following table summarizes property, plant and equipment.

	Average Remaining Useful Life	December 31,	
(in thousands)	(Years)	2020	2019
Land		$ 36,925	$ 29,253
Plant			
Electric generation, distribution and transmission	47	2,015,291	1,869,385
Natural gas transmission and distribution	54	701,175	616,949
Other buildings and improvements	61	13,018	13,705
Equipment	13	38,269	32,205
Construction in process		71,664	115,872
Other	12	68,031	62,425
Total property, plant and equipment		2,944,373	2,739,794
Accumulated depreciation and amortization		(1,030,627)	(991,145)
Net property, plant and equipment[(a)]		$ 1,913,746	$ 1,748,649

(a) The debt component of AFUDC totaled $0 and $2 million at December 31, 2020, and 2019, respectively.

8. OTHER INCOME AND EXPENSES, NET

The components of Other Income and Expenses, net on the Statements of Operations are as follows.

	Years Ended December 31,		
(in thousands)	**2020**		**2019**
Income/(Expense):			
Interest income	**$**	**965**	$ 1,703
AFUDC equity		**(124)**	2,505
Other		**1,951**	3,746
Other Income and Expenses, net	**$**	**2,792**	$ 7,954

9. RELATED PARTY TRANSACTIONS

Duke Energy Kentucky engages in related party transactions, which are generally performed at cost and in accordance with KPSC and FERC regulations. Refer to the Balance Sheets for balances due to or from related parties. Material amounts related to transactions with related parties included in the Statements of Operations are presented in the following table.

	Years Ended December 31,	
(in thousands)	**2020**	**2019**
Corporate governance and shared service expenses[(a)]	**$ 86,038**	$ 82,931

(a) Duke Energy Kentucky is charged its proportionate share of costs, primarily related to human resources, employee benefits, information technology, legal and accounting fees, as well as other third-party costs, from an unconsolidated affiliate that is a consolidated affiliate of Duke Energy. These amounts are recorded in Operation, maintenance and other within Operating Expenses on the Statements of Operations.

In addition to the amounts presented above, Duke Energy Kentucky has other affiliate transactions, including certain indemnification coverages through Duke Energy's wholly owned captive insurance subsidiary, rental of office space, participation in a money pool arrangement with Duke Energy and certain of its subsidiaries, other operational transactions and its proportionate share of certain charged expenses. See Note 5 for more information regarding the money pool. These transactions are incurred in the ordinary course of business and are eliminated in Duke Energy's Consolidated Financial Statements.

Certain trade receivables have been sold by Duke Energy Kentucky to CRC, an unconsolidated entity formed by a subsidiary of Duke Energy. The proceeds obtained from the sales of receivables are largely cash but do include a subordinated note from CRC for a portion of the purchase price. See Note 12 for further information related to the sales of these receivables.

Intercompany Income Taxes

Duke Energy and its subsidiaries file a consolidated federal income tax return and other state and jurisdictional returns. Duke Energy Kentucky has a tax sharing agreement with Duke Energy for the allocation of consolidated tax liabilities and benefits. Income taxes recorded represent amounts Duke Energy Kentucky would incur as a separate C-Corporation. Duke Energy Kentucky had an intercompany tax payable balance of $2 million at December 31, 2020, and an intercompany tax receivable balance of $1 million at December 31, 2019.

10. DERIVATIVES AND HEDGING

COMMODITY PRICE RISK

Duke Energy Kentucky has limited exposure to market price changes of fuel and emission allowance costs incurred for its retail customers due to the use of cost tracking and recovery mechanisms. Duke Energy Kentucky does have exposure to the impact of market fluctuations in the prices of electricity, fuel and emission allowances associated with its generation output not utilized to serve retail operations or committed load (off-system, wholesale power sales). Duke Energy Kentucky's outstanding commodity derivatives, FTRs, had a notional volume of 2,559 gigawatt-hours and 1,887 gigawatt-hours at December 31, 2020, and 2019, respectively.

See Note 11 for additional information on the fair value of commodity derivatives.

INTEREST RATE RISK

Duke Energy Kentucky is exposed to changes in interest rates as a result of its issuance or anticipated issuance of variable-rate and fixed-rate debt. Interest rate risk is managed by limiting variable-rate exposure to a percentage of total debt and by monitoring changes in interest rates. To manage risk associated with changes in interest rates, Duke Energy Kentucky may enter into financial contracts including interest rate swaps and U.S. Treasury lock agreements. The notional amount of interest rate swaps outstanding was $26.7 million at December 31, 2020, and 2019. Financial contracts entered into by Duke Energy Kentucky are not designated as a hedge because they are accounted for under regulatory accounting. With regulatory accounting, the mark-to-market gains or losses are deferred as regulatory liabilities or assets, respectively. Regulatory assets and regulatory liabilities are amortized consistent with the treatment of related costs in the ratemaking process. The accrual of interest on swaps is recorded as Interest Expense on the Statements of Operations.

See Note 11 for additional information on the fair value of interest rate derivatives.

CREDIT RISK

Duke Energy Kentucky analyzes the financial condition of counterparties prior to entering into agreements and establishes credit limits and monitors the appropriateness of those limits on an ongoing basis. Credit limits and collateral requirements for retail electric customers are established by the KPSC.

Duke Energy Kentucky's industry has historically operated under negotiated credit lines for physical delivery contracts. Duke Energy Kentucky may use master collateral agreements to mitigate certain credit exposures. The collateral agreements require certain counterparties to post cash or letters of credit for the amount of exposure in excess of an established threshold. The threshold amount represents an unsecured credit limit determined in accordance with the corporate credit policy. Collateral agreements also provide that the inability to post collateral is sufficient cause to terminate contracts and liquidate all positions.

Duke Energy Kentucky also obtains cash or letters of credit from customers to provide credit support outside of collateral agreements, where appropriate, based on its financial analysis of the customer and the regulatory or contractual terms and conditions applicable to each transaction.

11. FAIR VALUE MEASUREMENTS

Fair value is the exchange price to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date. The fair value definition focuses on an exit price versus the acquisition cost. Fair value measurements use market data or assumptions market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs may be readily observable, corroborated by market data or generally unobservable. Valuation techniques maximize the use of observable inputs and minimize use of unobservable inputs. A midmarket pricing convention (the midpoint price between bid and ask prices) is permitted for use as a practical expedient. Fair value measurements are classified in three levels based on the fair value hierarchy as defined by GAAP.

Fair value accounting guidance permits entities to elect to measure certain financial instruments that are not required to be accounted for at fair value, such as equity method investments or the company's own debt, at fair value. Duke Energy Kentucky has not elected to record any of these items at fair value.

Commodity derivatives

If forward price curves are not observable for the full term of the contract and the unobservable period had more than an insignificant impact on the valuation, the commodity derivative is classified as Level 3. The valuation technique and unobservable input for an FTR is regional transmission organization auction pricing and FTR price - per megawatt-hour, respectively.

Interest rate derivatives

All over-the-counter interest rate contract derivatives are valued using financial models that utilize observable inputs for similar instruments and are classified as Level 2. Inputs include forward interest rate curves, notional amounts, interest rates and credit quality of the counterparties.

QUANTITATIVE DISCLOSURES

The following tables provide recorded balances for assets and liabilities measured at fair value on a recurring basis on the Balance Sheets. Derivative amounts in the table below exclude cash collateral.

	December 31, 2020		
(in thousands)	Total Fair Value	Level 2	Level 3
Derivative assets[a]	$ 1,380	$ —	$ 1,380
Derivative liabilities[b]	(6,299)	(6,299)	—
Net (liabilities) assets	$ (4,919)	$ (6,299)	$ 1,380

	December 31, 2019		
(in thousands)	Total Fair Value	Level 2	Level 3
Derivative assets[a]	$ 3,507	$ —	$ 3,507
Derivative liabilities[b]	(5,293)	(5,293)	—
Net (liabilities) assets	$ (1,786)	$ (5,293)	$ 3,507

(a) Included in Other within Current Assets and Other within Other Noncurrent Assets on the Balance Sheets. The amounts classified as Level 3 relate to FTRs.

(b) Included in Other within Current Liabilities and Other within Other Noncurrent Liabilities on the Balance Sheets. The amounts classified as Level 2 relate to interest rate swaps.

The following table provides a reconciliation of beginning and ending balances of assets and liabilities measured at fair value on a recurring basis where the determination of fair value includes significant unobservable inputs (Level 3).

	Derivatives (net)	
	Years Ended December 31,	
(in thousands)	2020	2019
Balance at beginning of period	$ 3,507	$ 6,056
Purchases, sales, issuances and settlements:		
Purchases	3,601	8,608
Settlements	(5,750)	(7,923)
Total gains (losses) included on the Balance Sheets as regulatory assets or liabilities	22	(3,234)
Balance at end of period	$ 1,380	$ 3,507

OTHER FAIR VALUE DISCLOSURES

The fair value of long-term debt, including current maturities, is summarized in the following table. Judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates determined are not necessarily indicative of the amounts Duke Energy Kentucky could have settled in current markets. The fair value of long-term debt is determined using Level 2 measurements.

	December 31, 2020		December 31, 2019	
(in thousands)	Book value	Fair value	Book value	Fair value
Long-Term debt, including current maturities	$ 728,796	$ 810,738	$ 658,807	$ 708,433

At December 31, 2020, and 2019, the fair value of cash and cash equivalents, accounts and notes receivable, and accounts and notes payable are not materially different from their carrying amounts because of the short-term nature of these instruments and/or because the stated rates approximate market rates.

12. VARIABLE INTEREST ENTITIES

A variable interest entity (VIE) is an entity that is evaluated for consolidation using more than a simple analysis of voting control. The analysis to determine whether an entity is a VIE considers contracts with an entity, credit support for an entity, the adequacy of the equity investment of an entity and the relationship of voting power to the amount of equity invested in an entity. This analysis is performed either upon the creation of a legal entity or upon the occurrence of an event requiring reevaluation, such as a significant change in an entity's assets or activities. A qualitative analysis of control determines the party that consolidates a VIE. This assessment is based on (i) what party has the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) what party has rights to receive benefits or is obligated to absorb losses that could potentially be significant to the VIE. The analysis of the party that consolidates a VIE is a continual reassessment.

Cinergy Receivables Company

CRC is a bankruptcy remote, special purpose entity that is an affiliate of Duke Energy Kentucky. As discussed below, Duke Energy Kentucky does not consolidate CRC as it is not the primary beneficiary. On a revolving basis, CRC buys certain accounts receivable arising from the sale of electricity, natural gas and related services from Duke Energy Kentucky. CRC borrows amounts under a credit facility to buy the receivables from Duke Energy Kentucky. Borrowing availability from the credit facility is limited to the amount of qualified receivables sold to CRC which generally exclude receivables past due more than a predetermined number of days and reserves for expected past due balances. The sole source of funds to satisfy the related debt obligation is cash collections from the receivables. Amounts borrowed under the credit facility are reflected on the Balance Sheets as Long-Term Debt.

Due to the COVID-19 pandemic, as described in Note 1, Duke Energy Kentucky suspended customer disconnections for nonpayment. The full impact of COVID-19 and Duke Energy Kentucky's related response on customers' ability to pay for service is uncertain. However, the level of past due receivables have increased significantly during the COVID-19 pandemic, and it is reasonably possible eventual write-offs of customer receivables may increase over current estimates. In 2020, CRC executed an amendment to its credit facility to manage the impact of past due receivables resulting from the suspension of customer disconnections from COVID-19. See Note 2 for information about COVID-19 orders from KPSC.

The proceeds Duke Energy Kentucky receives from the sale of receivables to CRC are approximately 75% cash and 25% in the form of a subordinated note from CRC. The subordinated note is a retained interest in the receivables sold. Duke Energy Kentucky had receivables of $21.0 million and $16.0 million from CRC at December 31, 2020, and 2019, respectively. These balances are included in Receivables from affiliated companies on the Balance Sheets and reflect Duke Energy Kentucky's retained interest in receivables sold to CRC.

CRC is considered a VIE because (i) equity capitalization is insufficient to support its operations, (ii) power to direct the activities that most significantly impact the economic performance of the entity is not held by the equity holder and (iii) deficiencies in net worth of CRC are funded by Duke Energy. The most significant activities that impact the economic performance of CRC are decisions made to manage delinquent receivables. Duke Energy is considered the primary beneficiary and consolidates CRC as it makes these decisions. Duke Energy Kentucky does not consolidate CRC.

The subordinated note held by Duke Energy Kentucky is stated at fair value. Carrying values of retained interests are determined by allocating carrying value of the receivables between assets sold and interests retained based on relative fair value. The allocated basis of the subordinated note is not materially different than the face value because (i) the receivables generally turnover in less than two months, (ii) credit losses are reasonably predictable due to the broad customer base and lack of significant concentration and (iii) the equity in CRC is subordinate to all retained interests and thus would absorb losses first. The hypothetical effect on fair value of the retained interests assuming both a 10% and a 20% unfavorable variation in credit losses or discount rates is not material due to the short turnover of receivables and historically low credit loss history. Interest accrues to Duke Energy Kentucky on the retained interests using the acceptable yield method. This method generally approximates the stated rate on the note since the allocated basis and the face value are nearly equivalent. An impairment charge is recorded against the carrying value of both retained interests and purchased beneficial interest whenever it is determined that an other-than-temporary impairment has occurred. Duke Energy Kentucky's maximum exposure to loss does not exceed the carrying value.

Key assumptions used in estimating fair value are detailed in the following table.

	2020	2019
Anticipated credit loss ratio	0.4 %	0.4 %
Discount rate	1.6 %	3.3 %
Receivables turnover rate	11.3 %	11.4 %

The following table presents gross and net receivables sold.

	December 31,	
(in thousands)	2020	2019
Receivables sold	$ 66,298	$ 61,804
Less: Retained interests	21,031	16,029
Net receivables sold	$ 45,267	$ 45,775

The following table shows sales and cash flows related to receivables sold.

	Years Ended December 31,	
(in thousands)	2020	2019
Sales		
Receivables sold	$ 456,902	$ 483,703
Loss recognized on sale	1,427	2,381
Cash flows		
Cash proceeds from receivables sold	$ 450,487	$ 488,364
Collection fees received	228	242
Return received on retained interests	937	1,577

Cash flows from sales of receivables are reflected within Cash Flows from Operating Activities and Cash Flows from Investing Activities on the Statements of Cash Flows.

Collection fees received in connection with the servicing of transferred accounts receivable are included in Operation, maintenance and other on the Statements of Operations. The loss recognized on sales of receivables is calculated monthly by multiplying receivables sold during the month by the required discount. The required discount is derived monthly utilizing a three-year weighted average formula that considers charge-off history, late charge history and turnover history on the sold receivables, as well as a component for the time value of money. The discount rate, or component for the time value of money, is the prior month-end London Interbank Offered Rate plus a fixed rate of 1.00%.

13. REVENUE

Duke Energy Kentucky recognizes revenue consistent with amounts billed under tariff offerings or at contractually agreed upon rates based on actual physical delivery of electric or natural gas service, including estimated volumes delivered when billings have not yet occurred. As such, the majority of Duke Energy Kentucky's revenues have fixed pricing based on the contractual terms of the published tariffs, with variability in expected cash flows attributable to the customer's volumetric demand and ultimate quantities of energy or natural gas supplied and used during the billing period. The stand-alone selling price of related sales are designed to support recovery of prudently incurred costs and an appropriate return on invested assets and are primarily governed by published tariff rates or contractual agreements approved by relevant regulatory bodies. Certain excise taxes and franchise fees levied by state or local governments are required to be paid even if not collected from the customer. These taxes are recognized on a gross basis as part of revenues. Duke Energy Kentucky elects to account for all other taxes net of revenues.

Performance obligations are satisfied over time as energy or natural gas is delivered and consumed with billings generally occurring monthly and related payments due within 30 days, depending on regulatory requirements. In no event does the timing between payment and delivery of the goods and services exceed one year. Using this output method for revenue recognition provides a faithful depiction of the transfer of electric and natural gas service as customers obtain control of the commodity and benefit from its use at delivery. Additionally, Duke Energy Kentucky has an enforceable right to consideration for energy or natural gas delivered at any discrete point in time and will recognize revenue at an amount that reflects the consideration to which Duke Energy Kentucky is entitled for the energy or natural gas delivered.

As described above, the majority of Duke Energy Kentucky's tariff revenues are at-will and, as such, related contracts with customers have an expected duration of one year or less and will not have future performance obligations for disclosure.

Duke Energy Kentucky earns substantially all of its revenues through the sale of electricity and natural gas.

Electricity Sales

Electric sales revenues are earned primarily through retail and wholesale electric service through the generation, transmission, distribution and sale of electricity. Duke Energy Kentucky generally provides retail electric service customers with their full electric load requirements and sells wholesale block sales of electricity into the market.

Retail electric service is generally marketed throughout Duke Energy Kentucky's electric service territory through standard service offers. The standard service offers are through tariffs determined by the KPSC. Each tariff, which is assigned to customers based on customer class, has multiple components such as an energy charge, customer charge, demand charge and applicable riders. Duke Energy Kentucky considers each of these components to be aggregated into a single performance obligation for providing electric service. Electricity is considered a single performance obligation satisfied over time consistent with the series guidance and is provided and consumed over the billing period, generally one month. Retail electric service is typically provided to at-will customers who can cancel service at any time, without a substantive penalty. Additionally, Duke Energy Kentucky adheres to applicable regulatory requirements to ensure the collectability of amounts billed and appropriate mitigating procedures are followed when necessary. As such, revenue from contracts with customers is equivalent to the electricity supplied and billed in that period (including unbilled estimates).

Wholesale electric service is provided through block sales of electricity. Revenues for block sales are recognized monthly as energy is delivered and stand-ready service is provided, consistent with invoiced amounts and unbilled estimates.

Natural Gas Sales

Natural gas sales revenues are earned through retail natural gas service through the transportation, distribution and sale of natural gas. Duke Energy Kentucky generally provides natural gas service customers with all natural gas load requirements. Additionally, while natural gas can be stored, substantially all natural gas provided by Duke Energy Kentucky is consumed by customers simultaneously with receipt of delivery.

Retail natural gas service is marketed throughout Duke Energy Kentucky's natural gas service territory using published tariff rates. The tariff rates are established by the KPSC. Each tariff, which is assigned to customers based on customer class, has multiple components, such as a commodity charge, customer or monthly charge and transportation costs. Duke Energy Kentucky considers each of these components to be aggregated into a single performance obligation for providing natural gas service. For contracts where Duke Energy Kentucky provides all of the customer's natural gas needs, the delivery of natural gas is considered a single performance obligation satisfied over time, and revenue is recognized monthly based on billings and unbilled estimates as service is provided and the commodity is consumed over the billing period. Additionally, natural gas service is typically at-will and customers can cancel service at any time, without a substantive penalty. Duke Energy Kentucky also adheres to applicable regulatory requirements to ensure the collectability of amounts billed and receivable and appropriate mitigating procedures are followed when necessary.

Disaggregated Revenues

For electric and natural gas sales, revenue by customer class is most meaningful to Duke Energy Kentucky as each respective customer class collectively represents unique customer expectations of service, generally has different energy and demand requirements and operates under tailored, regulatory approved pricing structures. Additionally, each customer class is impacted differently by weather and a variety of economic factors including the level of population growth, economic investment, employment levels and regulatory activities. As such, analyzing revenues disaggregated by customer class allows Duke Energy Kentucky to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

Disaggregated revenues are presented as follows:

(in thousands)	Years Ended December 31,	
By market or type of customer	2020	2019
Electricity Sales		
Residential	$ 136,723	$ 138,561
General	139,705	151,658
Industrial	55,875	62,249
Wholesale[(a)]	9,044	11,698
Other revenues	5,956	7,713
Total Electricity Sales revenue from contracts with customers	$ 347,303	$ 371,879
Natural Gas Sales		
Residential	$ 65,941	$ 66,055
Commercial	25,570	28,034
Industrial	4,449	5,307
Other revenues	2,814	2,674
Total Natural Gas Sales revenue from contracts with customers	$ 98,774	$ 102,070
Total revenue from contracts with customers	$ 446,077	$ 473,949
Other revenue sources[(b)]	$ 5,689	4,676
Total revenues	$ 451,766	$ 478,625

(a) Duke Energy Kentucky nets wholesale electric sales and purchases on an hourly basis. As such, the net position may result in fluctuations between positive and negative net revenues at the end of a reporting period.

(b) Other revenue sources include revenues from derivatives, leases and alternative revenue programs that are not considered revenues from contracts with customers.

As described in Note 1, Duke Energy Kentucky adopted the new guidance for credit losses effective January 1, 2020, using the modified retrospective method of adoption, which does not require restatement of prior year reported results. The following table presents the reserve for credit losses for trade and other receivables based on adoption of the new standard.

(in thousands)	
Balance at December 31, 2019	$ 314
Write-offs	(373)
Credit Loss Expense	383
Balance at December 31, 2020	$ 324

Trade and other receivables are evaluated based on an estimate of the risk of loss over the life of the receivable and current and historical conditions using supportable assumptions. Management evaluates the risk of loss for trade and other receivables by comparing the historical write-off amounts to total revenue over a specified period. Historical loss rates are adjusted due to the impact of current conditions, including the impacts of COVID-19, as well as forecasted conditions over a reasonable time period. The calculated write-off rate can be applied to the receivable balance for which an established reserve does not already exist. Management reviews the assumptions and risk of loss periodically for trade and other receivables. Due to the COVID-19 pandemic, as described in Note 1, Duke Energy Kentucky suspended standard billing and credit practices, disconnections for nonpayment and late payment charges, all of which have since been resumed for residential and non-residential customers. The specific actions taken by Duke Energy Kentucky are described in Note 2. The impact of COVID-19 and Duke Energy Kentucky's related response on customers' ability to pay for service is uncertain, and it is reasonably possible eventual write-offs of customer receivables may increase over current estimates.

The aging of trade receivables is presented in the table below. Duke Energy Kentucky considers receivables greater than 30 days outstanding past due.

(in thousands)	
Unbilled Receivables	$ 779
0-30 days	4,094
30-60 days	330
60-90 days	59
90+ days	3,395
Trade and Other Receivables	$ 8,657

IMPACT OF WEATHER AND THE TIMING OF BILLING PERIODS

Revenues and costs are influenced by seasonal weather patterns. Peak sales of electricity occur during the summer and winter months, which results in higher revenue and cash flows during these periods. By contrast, lower sales of electricity occur during the spring and fall, allowing for scheduled plant maintenance. Residential and general service customers are more impacted by weather than industrial customers. Estimated weather impacts are based on actual current period weather compared to normal weather conditions. Normal weather conditions are defined as the long-term average of actual historical weather conditions. Heating degree days measure the variation in weather based on the extent the average daily temperature falls below a base temperature. Cooling degree days measure the variation in weather based on the extent the average daily temperature rises above the base temperature. Each degree of temperature below the base temperature counts as one heating degree day and each degree of temperature above the base temperature counts as one cooling degree day.

The estimated impact of weather on earnings for electricity sales 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.

Natural gas costs and revenues are influenced by seasonal patterns due to peak natural gas sales occurring during the winter months as a result of space heating requirements. Residential customers are the most impacted by weather. There are certain regulatory mechanisms for the Kentucky service territory that normalize the margins collected from certain customer classes during the winter.

UNBILLED REVENUE

Unbilled revenues are recognized by applying customer billing rates to the estimated volumes of energy or natural gas delivered but not yet billed. Unbilled revenues can vary significantly from period to period as a result of seasonality, weather, customer usage patterns, customer mix, average price in effect for customer classes, timing of rendering customer bills and meter reading schedules, and the impact of weather normalization or margin decoupling mechanisms. Receivables on the Balance Sheets include amounts related to unbilled wholesale revenues of $779 thousand and $51 thousand at December 31, 2020, and 2019, respectively.

Duke Energy Kentucky sells nearly all of its retail accounts receivable, including receivables for unbilled revenues to CRC on a revolving basis. As discussed further in Note 8, Duke Energy Kentucky accounts for these transfers of receivables to CRC as sales. Accordingly, the receivables sold are not reflected on the Balance Sheets. Receivables for unbilled revenues included in the sales of accounts receivable to CRC were $23 million and $22 million at December 31, 2020, and 2019, respectively.

14. EMPLOYEE BENEFIT PLANS

DEFINED BENEFIT RETIREMENT PLANS

Duke Energy Kentucky participates in qualified and non-qualified defined benefit retirement plans and other post-retirement benefit plans sponsored by Duke Energy. Duke Energy allocates pension and other post-retirement obligations and costs related to these plans to Duke Energy Kentucky. The plans cover most employees using a cash balance formula. Under a cash balance formula, a plan participant accumulates a retirement benefit consisting of pay credits based upon a percentage of current eligible earnings based on age and/or years of service and interest credits. Certain employees are covered under plans that use a final average earnings formula. Under these average earnings formulas, a plan participant accumulates a retirement benefit equal to the sum of percentages of their (i) highest three-year or four-year average earnings, (ii) highest three-year or four-year average earnings in excess of covered compensation per year of participation (maximum of 35 years) and/or (iii) highest three-year average earnings times years of participation in excess of 35 years. Duke Energy also maintains, and Duke Energy Kentucky participates in, non-qualified, non-contributory defined benefit retirement plans which cover certain executives. The qualified and non-qualified non-contributory defined benefit plans are closed to new participants.

Duke Energy uses a December 31 measurement date for its defined benefit retirement plan assets and obligations. Actuarial gains experienced by the defined benefit retirement plans in remeasuring plan assets as of December 31, 2020, and 2019 were attributable to actual investment performance that exceeded expected investment performance. Actuarial losses experienced by the defined benefit retirement plans in remeasuring plan obligations as of December 31, 2020, and 2019 were primarily attributable to the decrease in the discount rate used to measure plan obligations.

As a result of the application of settlement accounting due to total lump-sum benefit payments exceeding the settlement threshold (defined as the sum of the service cost and interest cost on projected benefit obligation components of net periodic pension costs) for one of the qualified pension plans in which it participates, Duke Energy Kentucky recognized settlement charges of $365 thousand as a regulatory asset within Other Noncurrent Assets on the Balance Sheets as of December 31, 2019. Settlement charges include amounts allocated by Duke Energy for employees of Duke Energy Kentucky and allocated charges for their proportionate share of settlement charges for employees of Duke Energy's shared services affiliate.

Duke Energy's policy is to fund amounts on an actuarial basis to provide assets sufficient to meet benefit payments to be paid to plan participants. Duke Energy Kentucky did not make any contributions in 2020. Actual contributions for Duke Energy Kentucky were $481 thousand for the year ended December 31, 2019. Duke Energy Kentucky does not anticipate making any contributions in 2021.

Net periodic benefit costs disclosed in the tables below represent the cost of the respective plan for the periods presented prior to capitalization of amounts reflected as Net property, plant and equipment, on the Balance Sheets. Only the service cost component of net periodic benefit costs is eligible to be capitalized. The remaining non-capitalized portions of net periodic benefit costs are classified as either: (i) service cost, which is recorded in Operations, maintenance and other on the Statements of Operations; or as (ii) components of non-service cost, which is recorded in Other income and expenses, net, on the Statements of Operations. Amounts presented in the tables below represent the amounts of pension and other post-retirement benefit cost allocated by Duke Energy for employees of Duke Energy Kentucky. Additionally, Duke Energy Kentucky is allocated its proportionate share of pension and other post-retirement benefit cost for employees of Duke Energy's shared services affiliate that provides support to Duke Energy Kentucky. These allocated amounts are included in the governance and shared services costs discussed in Note 9.

QUALIFIED PENSION PLANS

Components of Net Periodic Pension Costs

	Years Ended December 31,	
(in thousands)	**2020**	**2019**
Service cost	**$ 1,179**	$ 1,218
Interest cost on projected benefit obligation	**3,761**	4,315
Expected return on plan assets	**(6,539)**	(6,677)
Amortization of prior service credit	**(98)**	(100)
Amortization of actuarial loss	**1,965**	1,431
Amortization of settlement charges	**350**	15
Net periodic pension costs	**$ 618**	$ 202

Amounts Recognized in Regulatory Assets

	December 31,	
(in thousands)	**2020**	**2019**
Regulatory assets, net (decrease) increase	**$ (127)**	$ 4,510

Reconciliation of Funded Status to Net Amount Recognized

	Years Ended December 31,	
(in thousands)	**2020**	**2019**
Change in Projected Benefit Obligation		
Obligation at prior measurement date	**$ 117,086**	$ 103,395
Service cost	**1,082**	1,121
Interest cost	**3,761**	4,315
Actuarial losses	**6,427**	15,276
Transfers [(a)]	**—**	(1,640)
Benefits paid	**(8,224)**	(5,381)
Obligation at measurement date	**$ 120,132**	$ 117,086
Accumulated Benefit Obligation at measurement date	**$ 118,545**	$ 114,975
Change in Fair Value of Plan Assets		
Plan assets at prior measurement date	**$ 103,267**	$ 94,292
Actual return on plan assets	**11,130**	15,515
Benefits paid	**(8,224)**	(5,381)
Employer contributions	**—**	481
Transfers [(a)]	**—**	(1,640)
Plan assets at measurement date	**$ 106,173**	$ 103,267
Funded status of plan	**$ (13,959)**	$ (13,819)

(a) Transfers represents net amounts associated with plan participants that have moved to/from other Duke Energy subsidiaries.

Amounts Recognized in the Balance Sheets

		December 31,		
(in thousands)		2020		2019
Prefunded pension[(a)]	$	12,852	$	9,775
Noncurrent pension liability[(b)]		26,811		23,594
Net liability recognized	$	(13,959)	$	(13,819)
Regulatory assets	$	34,030	$	34,157

(a) Included in Other within Investments and Other Assets on the Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Balance Sheets.

In 2019, amounts to be reported in net periodic pension expense in the next year were $1,836 thousand related to unrecognized net actuarial loss and ($98) thousand related to unrecognized prior service credit.

Information for Plans with Accumulated Benefit Obligation in Excess of Plan Assets

		December 31,		
(in thousands)		2020		2019
Projected benefit obligation	$	53,559	$	50,494
Accumulated benefit obligation		51,971		48,383
Fair value of plan assets		26,748		26,901

Assumptions Used for Pension Benefits Accounting

	December 31,	
	2020	2019
Benefit Obligations		
Discount rate	2.60 %	3.30 %
Interest crediting rate	4.00 %	4.00 %
Salary increase	3.50 %	3.50 %
Net Periodic Benefit Cost		
Discount rate	3.30 %	4.30 %
Interest crediting rate	4.00 %	4.00 %
Salary increase	3.50 %	3.50 %
Expected long-term rate of return on plan assets	6.85 %	6.85 %

The discount rate used to determine the current year pension obligation and following year's pension expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high quality corporate bonds that generate sufficient cash flow to provide for the projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

NON-QUALIFIED PENSION PLANS

The accumulated benefit obligation, which equals the projected benefit obligation for non-qualified pension plans, was $133 thousand for Duke Energy Kentucky as of December 31, 2020. Employer contributions, which equal benefits paid for non-qualified pension plans, were not material for the year ended December 31, 2020. Net periodic pension costs for non-qualified pension plans were not material for the years ended December 31, 2020, or 2019.

OTHER POST-RETIREMENT BENEFIT PLANS

Duke Energy provides, and Duke Energy Kentucky participates in, some health care and life insurance benefits for retired employees on a contributory and non-contributory basis. Employees are eligible for these benefits if they have met age and service requirements at retirement, as defined in the plans. The health care benefits include medical, dental and prescription drug coverage and are subject to certain limitations, such as deductibles and co-payments.

Duke Energy did not make any pre-funding contributions to its other post-retirement benefit plans during the years ended December 31, 2020, and 2019.

Components of Net Periodic Other Post-Retirement Benefit Costs

	Years Ended December 31,	
(in thousands)	2020	2019
Service cost	$ 133	$ 150
Interest cost on projected benefit obligation	174	225
Expected return on plan assets	(77)	(72)
Amortization of prior service credit	(236)	(236)
Amortization of actuarial loss	231	247
Net periodic post-retirement pension costs	$ 225	$ 314

Amounts Recognized in Regulatory Assets and Regulatory Liabilities

	December 31,	
(in thousands)	2020	2019
Regulatory assets, net decrease	$ (209)	$ (232)
Regulatory liabilities, net increase	712	123

Reconciliation of Funded Status to Accrued Other Post-Retirement Benefit Costs

	Years Ended December 31,	
(in thousands)	2020	2019
Change in Projected Benefit Obligation		
Accumulated post-retirement benefit obligation at prior measurement date	$ 5,596	$ 5,557
Service cost	133	150
Interest cost	174	225
Plan participants' contributions	187	213
Actuarial gains	(820)	(205)
Benefits paid	(651)	(526)
Accrued retiree drug subsidy	—	182
Accumulated post-retirement benefit obligation at measurement date	$ 4,619	$ 5,596
Change in Fair Value of Plan Assets		
Plan assets at prior measurement date	$ 1,562	$ 1,352
Actual return on plan assets	184	211
Plan participants' contributions	187	213
Benefits paid	(651)	(526)
Employer contributions	468	312
Plan assets at measurement date	$ 1,750	$ 1,562
Funded status of plan	$ (2,869)	$ (4,034)

Amounts Recognized in the Balance Sheets

	December 31,	
(in thousands)	2020	2019
Current post-retirement liability[(a)]	$ 156	$ 163
Noncurrent post-retirement liability[(b)]	2,713	3,871
Total accrued post-retirement liability	$ 2,869	$ 4,034
Regulatory assets	$ 1,634	$ 1,843
Regulatory liabilities	$ 6,041	$ 5,329

(a) Included in Other within Current Liabilities on the Balance Sheets.
(b) Included in Accrued pension and other post-retirement benefit costs on the Balance Sheets.

In 2019, amounts to be reported in net periodic pension expense in the next year were $23 thousand related to unrecognized net actuarial loss and ($236) thousand related to unrecognized prior service credit.

Assumptions Used for Other Post-Retirement Benefits Accounting

	December 31, 2020	2019
Benefit Obligations		
Discount rate	**2.60 %**	3.30 %
Net Periodic Benefit Cost		
Discount rate	**3.30 %**	4.30 %
Expected long-term rate of return on plan assets	**6.85 %**	6.85 %

The discount rate used to determine the current year other post-retirement benefits obligation and following year's other post-retirement benefits expense is based on a bond selection-settlement portfolio approach. This approach develops a discount rate by selecting a portfolio of high quality corporate bonds that generate sufficient cash flow to provide for the projected benefit payments of the plan. The selected bond portfolio is derived from a universe of non-callable corporate bonds rated Aa quality or higher. After the bond portfolio is selected, a single interest rate is determined that equates the present value of the plan's projected benefit payments discounted at this rate with the market value of the bonds selected.

Assumed Health Care Cost Trend Rate

	December 31, 2020	2019
Health care cost trend rate assumed for next year	**6.25 %**	6.00 %
Rate to which the cost trend is assumed to decline (the ultimate trend rate)	**4.75 %**	4.75 %
Year that the rate reaches the ultimate trend rate	**2028**	2026

Expected Benefit Payments

The following table presents Duke Energy's expected benefit payments to participants on behalf of Duke Energy Kentucky in its qualified and other post-retirement benefit plans over the next 10 years. These benefit payments reflect expected future service, as appropriate.

(in thousands)	Qualified Plans	Other Post-Retirement Plans	Total
Years ending December 31,			
2021	$ 9,440	$ 821	$ 10,261
2022	8,931	595	9,526
2023	8,482	493	8,975
2024	8,195	414	8,609
2025	7,768	374	8,142
2026–2030	35,309	1,334	36,643

MASTER RETIREMENT TRUST

The assets for the Duke Energy Kentucky plans discussed above are derived from the Master Retirement Trust (Master Trust) that is held by Duke Energy and, as such, Duke Energy Kentucky is allocated its proportionate share of assets discussed below. Assets for both the qualified pension and other post-retirement benefits are maintained in the Master Trust. Duke Energy also invests other post-retirement assets in Voluntary Employees' Beneficiary Association trusts. The investment objective is to achieve sufficient returns, subject to a prudent level of portfolio risk, for the purpose of promoting the security of plan benefits for participants. As of December 31, 2020, Duke Energy assumes pension and other post-retirement plan assets will generate a long-term rate of return of 6.50%. The expected long-term rate of return was developed using a weighted average calculation of expected returns based primarily on future expected returns across asset classes considering the use of active asset managers, where applicable. The asset allocation targets were set after considering the investment objective and the risk profile. Equity securities are held for their high expected return. Debt securities are primarily held to hedge the qualified pension plan liability. Return seeking debt securities, hedge funds and other global securities are held for diversification. Investments within asset classes are diversified to achieve broad market participation and reduce the impact of individual managers or investments.

Effective January 1, 2020, the target asset allocation for the Duke Energy Retirement Master Trust is 58% liability hedging assets and 42% return-seeking assets. Duke Energy periodically reviews its asset allocation targets, and over time, as the funded status of the benefit plans increase, the level of asset risk relative to plan liabilities may be reduced to better manage Duke Energy's benefit plan liabilities and reduce funded status volatility.

The following table presents target and actual asset allocations for the Master Trust at December 31, 2020, and 2019.

Asset Category	Target Allocation	Actual Allocation at December 31, 2020	2019
Global equity securities	28 %	**30 %**	27 %
Global private equity securities	1 %	**1 %**	1 %
Debt securities	58 %	**55 %**	57 %
Return seeking debt securities	4 %	**5 %**	5 %
Hedge funds	3 %	**3 %**	3 %
Real estate and cash	6 %	**6 %**	7 %
Total	100 %	**100 %**	100 %

EMPLOYEE SAVINGS PLAN

Duke Energy Kentucky also participates in employee savings plans sponsored by Duke Energy. Most employees participate in a matching contribution formula where Duke Energy provides a matching contribution generally equal to 100% of employee before-tax and Roth 401(k) contributions and, as applicable, after-tax contributions of up to 6% of eligible pay per period.

For new and rehired non-union and certain unionized employees who are not eligible to participate in Duke Energy's defined benefit plans, an additional employer contribution of 4% of eligible pay per pay period, which is subject to a three-year vesting schedule, is provided to the employee's savings plan account.

Duke Energy Kentucky's expense related to its proportionate share of pretax employer contributions and the additional 4% employer contribution was $1,225 thousand and $1,150 thousand for the years ended December 31, 2020, and 2019, respectively.

15. INCOME TAXES

INCOME TAX EXPENSE

Components of Income Tax Expense

(in thousands)	Years Ended December 31, 2020	2019
Current income taxes		
Federal	**$ 4,226**	$ (2,208)
State	**816**	(161)
Total current income taxes	**5,042**	(2,369)
Deferred income taxes		
Federal	**3,005**	8,870
State	**1,722**	2,805
Total deferred income taxes[(a)]	**4,727**	11,675
Investment tax credit amortization	**(61)**	(61)
Total income tax expense included in Statements of Operations	**$ 9,708**	$ 9,245

(a) Total deferred income taxes includes utilization of NOL carryforwards and tax credit carryforwards of $1.2 million.

Statutory Rate Reconciliation

The following table presents a reconciliation of income tax expense at the U.S. federal statutory tax rate to actual tax expense.

(in thousands)	Years Ended December 31, 2020	2019
Income tax expense, computed at the statutory rate of 21%	$ 12,149	$ 12,204
State income tax, net of federal income tax effect	2,007	2,089
Amortization of excess deferred income tax	(4,213)	(4,191)
Tax Credits	(272)	(409)
Other items, net	37	(448)
Total income tax expense	$ 9,708	$ 9,245
Effective tax rate	16.8 %	15.9 %

DEFERRED TAXES

Net Deferred Income Tax Liability Components

(in thousands)	Years Ended December 31, 2020	2019
Deferred credits and other liabilities	$ 213	$ 139
Lease obligations	2,190	2,281
Tax credits and NOL carryforwards	8,135	9,403
Pension, post-retirement and other employee benefits	5,414	5,326
Regulatory liabilities and deferred credits	5,228	7,640
Investments and other liabilities	921	655
Other	1,713	2,863
Total deferred income tax assets	23,814	28,307
Accelerated depreciation rates	(266,186)	(260,002)
Total deferred income tax liabilities	(266,186)	(260,002)
Net deferred income tax liabilities	$ (242,372)	$ (231,695)

The following table presents the expiration of tax credits and NOL carryforwards.

(in thousands)	December 31, 2020 Amount	Expiration Year
General business credits	$ 4,779	2024 — 2040
Federal NOL carryforwards[(a)]	3,259	Indefinite
Charitable contribution carryforwards	62	2022 — 2025
State NOL carryforwards	35	2037
Total tax credits and NOL carryforwards	$ 8,135	

(a) Indefinite carryforward for Federal NOLs generated in tax years beginning after December 31, 2017.

UNRECOGNIZED TAX BENEFITS

The following table presents changes to unrecognized tax benefits.

(in thousands)	Years Ended December 31, 2020	2019
Unrecognized tax benefits – January 1	$ 405	$ 193
Unrecognized tax benefit increases	29	212
Total changes	29	212
Unrecognized tax benefits – December 31	$ 434	$ 405

The following table includes additional information regarding the unrecognized tax benefits at December 31, 2020. Duke Energy Kentucky does not expect a decrease in unrecognized tax benefits within the next 12 months.

(in thousands)	December 31, 2020
Amount that if recognized, would affect the effective tax rate or regulatory liability[(a)]	$ 434

(a) Duke Energy Kentucky is unable to estimate the specific amounts that would affect the effective tax rate versus the regulatory liability.

OTHER TAX MATTERS

Duke Energy Kentucky recognized no interest income, interest expense or penalties related to income taxes on the Statements of Operations in 2020, or 2019. As of December 31, 2020, and 2019, no amounts were recognized on the Balance Sheets for interest or penalties related to income taxes.

Duke Energy Kentucky is no longer subject to U.S. federal examination for years before 2016. With few exceptions, Duke Energy Kentucky is no longer subject to state, local or non-U.S. income tax examinations by tax authorities for years before 2016.