

Research Update:

Duke Energy Corp. And Subsidiaries Outlooks Revised To Stable On Announced Equity Offering; Ratings Affirmed

November 20, 2019

Rating Action Overview

- Charlotte, N.C.-based Duke Energy Corp. has announced a \$2.5 billion equity offering, structured with a forward contract that it expects to close by year-end 2020.
- We expect the proceeds will be used for capital spending, working capital, and to reduce debt, which we anticipate will result in improving financial measures that are consistently above our downgrade threshold of funds from operations (FFO) to debt of 15%.
- We believe this announcement is again indicative of management's commitment to credit quality that has been consistently demonstrated over the past two years.
- We are revising our outlook on Duke Energy and all its subsidiaries to stable from negative, and affirming our ratings on the company and all its subsidiaries.
- In addition, multiple subsidiaries are no longer "under criteria observation" due to a change in our revised group rating methodology.
- The stable outlook reflects our view that the company's consolidated financial measures will remain above our downgrade threshold, including FFO to debt consistently above 15% throughout our forecast period. The stable outlook also assumes that the company will continue to be committed to its present level of credit quality, and will effectively manage regulatory risk across its key regulatory jurisdictions.

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Rating Action Rationale

Our decision to revise the outlook on Duke Energy Corp. and its subsidiaries follows its announced equity forward transaction of \$2.5 billion. We expect that Duke Energy's proceeds from this issuance will result in improved consolidated financial measures, including funds from operations (FFO) to debt consistently above 15% throughout our forecast period.

The incremental equity issuance indicates management's commitment to credit quality.

Although potential headwinds still exist for Duke Energy stemming primarily from delays in its Atlantic Coast Pipeline (ACP) project, coal ash risks, and regulatory lag in the Carolinas, the equity transaction indicates management's commitment to credit quality because it demonstrates the company's willingness and capacity to take the prudent steps necessary to counteract significant issues that could have potentially weakened its credit quality.

Several of Duke Energy's subsidiaries are no longer under criteria observation due to a change in our revised group ratings methodology.

Duke Energy Carolinas (DEC), Duke Energy Progress (DEP), Progress Energy Inc., and Piedmont Natural Gas (PNG) were under criteria observation after we published our revised "Group Rating Methodology" on July 1, 2019. Following our review, we concluded that the funding for these entities is not highly independent from the group. Specifically, the credit facilities for these entities are linked to Duke Energy's master credit agreement, meaning that that we do not view them as separate for the purpose of insulation.

Our assessment of Duke Energy's business risk profile remains unchanged.

Duke Energy's business risk profile reflects its very large size and low-risk regulated utilities, which provide electricity and natural gas to customers in North Carolina, South Carolina, Florida, Indiana, Ohio, Tennessee, and Kentucky. We view Duke Energy's modest nonutility, contracted wind and solar investments as relatively minimal, representing well below 5% of its overall credit profile. On a forward-looking basis, we view the Carolinas as accounting for about 60% of Duke Energy's regulated EBITDA, with Florida and Indiana accounting for about 16% and 12%, respectively. Duke Energy Ohio (DEO) and PNG account for 7% and 5%, respectively, of regulated EBITDA.

Our base-case scenario assumptions include the physical settlement of the \$2.5 billion equity forward transaction by year-end 2020, and annual capital spending averaging about \$11 billion through 2020, before moderating to average about \$9.5 billion beginning in 2021.

Our base-case further assumes \$2 billion of hybrid instruments issued in 2019, annual common equity issuance of approximately \$500 million annually through 2022, dividends averaging about \$2.9 billion, and future key rate orders that are supportive of credit quality for DEC and DEP in North Carolina, Duke Energy Indiana (DEI), and for PNG. Furthermore, our base case assumes proceeds from the recently closed sale of its minority interest in its commercial renewable portfolio assets, ACP is fully in service by 2022, and about \$1 billion of favorable tax positions utilized over our forecast period. Overall, we expect FFO to debt to be only slightly above 15% over our forecast period, indicative of minimal cushion at the current rating level. We assess Duke Energy's financial measures against our medial volatility financial benchmarks compared with those used for the typical corporate issuer, reflecting the company's lower-risk, rate-regulated utility assets and effective management of regulatory risk.

Outlook

The stable outlook reflects our view that the company's consolidated financial measures will remain above our downgrade threshold, including FFO to debt consistently above 15% throughout our forecast period. The stable outlook also assumes that the company will continue to be committed to its present level of credit quality, and will effectively manage regulatory risk across its key regulatory jurisdictions.

Downside scenario

We could lower our ratings on Duke Energy and its subsidiaries over the next 24 months if its consolidated financial measures weaken, including FFO to debt that weakens to below 15%. We could also lower the ratings if Duke Energy's business risk increases because of additional regulatory lag, more stringent environmental rules related to its coal exposure, if we conclude that the company's regulatory risk management in its key states has weakened, or if the company shifts its strategic focus away from its predominantly lower risk regulated utility operations.

Upside scenario

Although unlikely, we could raise our ratings on Duke Energy and its subsidiaries over the next 24 months if its consolidated FFO to debt is consistently above 20%.

Company Description

Duke Energy, together with its subsidiaries, operates as an energy company through three segments: Electric Utilities and Infrastructure, Gas Utilities and Infrastructure, and Commercial Renewables. The Electric Utilities and Infrastructure segment generates, transmits, distributes, and sells electricity in the Carolinas, Florida, and the Midwest, and uses coal, hydroelectric, natural gas, oil, renewable sources, and nuclear fuel to generate electricity. It also engages in the wholesale of electricity to municipalities, electric cooperative utilities, and other load-serving entities. This segment serves approximately 7.7 million retail electric customers in six states in the Southeast and Midwest regions of the U.S. covering a service territory of approximately 95,000 square miles; and owns approximately 50,880 megawatts (MW) of generation capacity. The Gas Utilities and Infrastructure segment distributes natural gas to residential, commercial, industrial, and power generation natural gas customers, and owns, operates, and invests in various pipeline transmission and natural gas storage facilities. It has approximately 1.6 million customers, including 1.1 million customers located in North Carolina, South Carolina, and Tennessee, as well as 531,000 customers located in southwestern Ohio and northern Kentucky. The Commercial Renewables segment acquires, owns, builds, develops, and operates wind and solar renewable generation projects, including nonregulated renewable energy and energy storage services to utilities, electric cooperatives, municipalities, and commercial and industrial customers. This segment has 21 wind and 100 solar facilities and one battery storage facility with a capacity of 2,991 MW across 19 states.

Liquidity

We assess Duke's liquidity as adequate to cover its needs over the next 12 months. We expect the company's liquidity sources to exceed uses by 1.1x or more, and that it will meet our other requirements for such a designation. Duke's liquidity benefits from stable cash flow generation, ample availability under the revolving credit facilities, and manageable debt maturities over the next few years. Importantly, we use maintenance capital spending, recognizing that Duke can reduce capital spending in times of stress. The company's well-established and solid banking relationships, the ability to absorb high-impact, low probability events without the need for refinancing, and a satisfactory standing in credit markets also support our liquidity assessment as adequate. Duke also has revolving credit facilities totaling \$8 billion that backstop its commercial paper program. We rate this commercial paper 'A-2', reflecting our issuer credit rating on the

company.

Principal liquidity sources:

- Credit facility of \$8 billion;
- Cash of about \$380 million; and
- Cash FFO of about \$9.7 billion.

Principal liquidity uses:

- Debt maturities of close to \$5.6 billion over the next 12 months, including about \$2.5 billion outstanding under the company's commercial paper;
- Estimated maintenance capital spending of about \$8.5 billion; and
- Dividends of about \$2.9 billion.

Environmental, Social, And Governance

Approximately 75% of Duke's total electric generation fleet capacity of almost 51 gigawatts (GW) are fossil fuel-based (30% coal; 45% natural gas), which exposes it to the ongoing cost of operating older units in the face of disruptive technological advances and the potential for changing environmental regulations that may require significant capital investments. On September 2019, Duke Energy announced an updated climate strategy with a new goal of net-zero carbon emissions from electric generation by 2050.

Historically, the company has faced significant environmental, social, and financial repercussions from closing its coal ash ponds in North Carolina, but is mitigating this risk through the state's regulatory framework, which allows coal ash remediation costs to be recovered. But the potential for future regulatory disallowances related to the company's coal ash remediation still poses some risk. In addition, the company's carbon-free nuclear generation portfolio increases its operating risk and exposes it to longer-term nuclear waste storage risks despite the company's long-term track record of achieving safe operational standards of its nuclear fleet.

On the gas side, older assets are susceptible to natural gas leaks, which emit methane. The company also operates its utilities in regions of the U.S. that are prone to frequent hurricanes, which could increase the company's risk exposure because climate change is intensifying the severity and frequency of these natural disasters globally.

Overall, we assess Duke's environmental risk as higher than most peers given its environmental exposure, including those related to its coal exposure and hurricanes. Social and governance risk factors are in line with peers. We view Duke's ability to deliver safe and reliable services to customers as a positive social factor but generally in-line with peers. Duke has independent board of directors, who in our view, are capably engaged in risk oversight on behalf of all stakeholders.

Issue Ratings - Subordination Risk Analysis

Capital structure

Duke's capital structure consists of close to \$60 billion of long and short-term debt, including about \$37 billion of debt at its subsidiaries.

Analytical conclusions

The unsecured debt issued at the Duke Energy level is rated 'BBB+', one notch below the issuer credit rating, as the priority debt at its subsidiaries comprises more than 50% of the company's consolidated capital structure. Our commercial paper rating is 'A-2' based on our long-term issuer credit rating on the company. The junior subordinated notes and preferred stock are rated 'BBB', two notches below our issuer credit rating on the company. We rate these hybrid securities premised on their deferability and subordination.

Ratings Score Snapshot– Duke Energy Corp

Issuer credit rating: A-/Stable/A-2

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: 'a-'

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: 'a-'

- Group credit profile: 'a-'

Ratings Score Snapshot– Duke Energy Carolinas

Issuer credit rating: A-/Stable/A-2

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Intermediate

Anchor: 'a+'

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: 'a'

- Group credit profile: 'a-'

Ratings Score Snapshot– Progress Energy Inc

Issuer credit rating: A-/Stable/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: 'a-'

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: 'a-'

- Group credit profile: 'a-'

Ratings Score Snapshot– Duke Energy Progress

Issuer credit rating: A-/Stable/A-2

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/leverage: Significant

Anchor: 'a-'

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: 'a-'

- Group credit profile: 'a-'

Ratings Score Snapshot– Piedmont Natural Gas

Issuer credit rating: A-/Stable/A-2

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Significant

- Cash flow/leverage: Intermediate

Anchor: 'a+'

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)

- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: 'a'

- Group credit profile: 'a-'

Related Criteria

- General Criteria: Group Rating Methodology, July 1, 2019
- General Criteria: Hybrid Capital: Methodology And Assumptions, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria | Corporates | Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Ratings List

Ratings Affirmed; CreditWatch/Outlook Action

	To	From
Duke Energy Corp.		
Piedmont Natural Gas Co. Inc.		
Duke Energy Progress, LLC		
Duke Energy Ohio Inc.		
Duke Energy Kentucky Inc.		
Duke Energy Indiana Inc.		
Duke Energy Florida, LLC		
Duke Energy Carolinas LLC		
Cinergy Corp.		
Issuer Credit Rating	A-/Stable/A-2	A-/Negative/A-2
Florida Progress Corp.		
Progress Energy Inc.		
Issuer Credit Rating	A-/Stable/--	A-/Negative/--
Issue-Level Ratings Affirmed; Recovery Ratings Unchanged		
Duke Energy Carolinas LLC		
Senior Secured	A	A
Recovery Rating	1+	1+
Duke Energy Progress, LLC		
Senior Secured	A	A
Recovery Rating	1+	1+
Issue-Level Ratings Affirmed		
Duke Energy Corp.		
Senior Unsecured	BBB+	BBB+
Junior Subordinated	BBB	BBB
Preferred Stock	BBB	BBB
Commercial Paper	A-2	A-2
Duke Energy Carolinas LLC		
Senior Unsecured	A-	A-
Duke Energy Progress, LLC		
Preferred Stock	BBB	BBB
Piedmont Natural Gas Co. Inc.		
Senior Unsecured	A-	A-
Progress Energy Inc.		
Senior Unsecured	BBB+	BBB+

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