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Ratings

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Duke Energy Progress LLC

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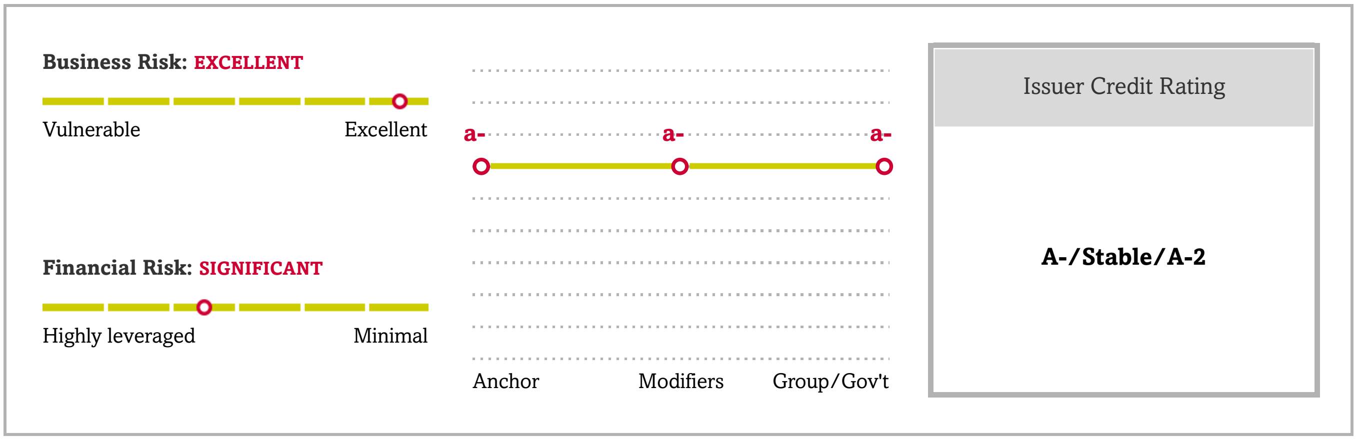
Duke Energy Progress LLC



Credit Highlights

Overview

Key strengths	Key risks
Duke Energy Progress (DEP) is a lower-risk, vertically integrated utility with regulatory diversity in North and South Carolina.	DEP's service territory is prone to hurricanes and severe storms. This risk is partially offset by recent passage of a storm securitization legislation that permits recovery for certain storm recovery costs.
The 2019 settlement reached between DEP and the North Carolina Department of Environmental Quality (NCDEQ) reduces legal uncertainty associated with the company's ash pond closure strategy.	There is potential for regulatory lag to delay the timeliness of the company's cost recovery, and future cost recovery for coal-ash costs per the terms of the NCDEQ settlement has not yet been determined.
DEP provides electric service to approximately 1.6 million customers, which supports cash flow stability.	We expect the revised U.S. tax code will weaken the company's cash flow metrics beginning in 2020.
DEP has generally managed regulatory risk effectively, primarily in North Carolina which accounts for about 85% of the company's retail rate base.	Environmental and operating risks associated with the company's coal-fired and nuclear power generation assets.

The 2019 NCDEQ settlement is favorable for DEP's credit quality. In December 2019, DEP entered into a settlement agreement with the NCDEQ and certain community groups under which DEP agreed to excavate two of the three remaining coal ash basins in North Carolina with ash moved to on-site lined landfills. At the one remaining basin, uncapped basin ash will be excavated and moved to lined landfills. In our opinion, this development is slightly favorable for DEP's credit quality because the settlement reduces legal uncertainties for DEP, although the company still has to receive adequate cost recovery for coal ash going forward from its regulators. Hence, future cost recovery for coal ash costs going forward is something we continue to monitor.

We view the passage of storm cost securitization legislation as favorable for DEP's credit quality. The passage of Senate Bill (SB) 559 means that DEP can use a new financing measure to recover restoration costs incurred in 2018, due to several storms and hurricanes experienced in its service territory. Upon receipt of a financing order from the North Carolina Utilities Commission (NCUC), DEP may issue storm recovery bonds that are secured through a dedicated storm recovery charge, with a true-up mechanism that is separate and distinct from the utility's base rate.

We continue to monitor the regulatory environment in South Carolina. In 2019 the Public Service Commission of South Carolina (PSCSC), issued an order granting DEP's request for a retail rate increase but denying recovery of certain coal ash costs. DEP has since filed a notice of appeal with the state Supreme Court, and the issue is still pending. The PSCSC order signals a potential change in the consistency and predictability of that state's regulatory construct. About

20% of DEP's retail rate base is in South Carolina.

We expect DEP's funds from operations (FFO) to debt to range from 21%-22% throughout our forecast period. The company's elevated capital spending, the pending DEP rate case, and dividends to parent Duke Energy Corp. result in FFO to debt of 21-%22% The company recently revised upward its capital spending budget, such that, capital spending for the 2020-2023 period is approximately $1.2 billion higher compared to our previous forecast. Partially offsetting is the DEP pending general rate case, filed with the NCUC on Oct. 30, 2019. DEP is requesting approximately $586 million, premised upon a 10.3% return on equity (ROE) using a 53% of capital structure. We expect givebacks to customers stemming from U.S. tax reform to offset a significant portion of this rate request. Overall, we expect DEP's financial measures to reflect the higher end of the significant financial risk profile category for DEP.

Outlook: Stable

The stable outlook on DEP is tied to that of its parent, reflecting our view that Duke Energy Corp.'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 parent Duke Energy will continue to commit 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 consolidated financial measures weaken, including FFO to debt falling below 15%. We could also lower the ratings if Duke Energy's business risk increases because of additional regulatory lag or more stringent environmental rules related to its coal exposure, if we conclude that the company's regulatory risk management in its key states had 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 consolidated FFO to debt is consistently above 20%.

Our Base-Case Scenario

Assumptions

- New rates in place stemming from the company's ongoing rate case in North Carolina.
- Storm securitization financing.
- Capital spending of averaging about $2.3 billion annually throughout our forecast period.
- Assumed dividends to parent averaging about $675

Key Metrics

	2019a	2020e	2021e
FFO to debt (%)	24.2	21-22	21-22
Debt to EBITDA (x)	3.6	3.2-4.0	3.2-4.0
Cash FFO to Interest	7.6	7.5	7.5

a--actual. e—estimate. FFO Funds from operations.

million beginning in 2020.

- Negative discretionary cash flow throughout our forecast period.

Company Description

DEP engages in the generation, transmission, distribution, and sale of electricity and serves about 1.6 million electric customers in North Carolina and South Carolina. DEP is a wholly owned subsidiary of Duke Energy and contributes about 25% of Duke Energy's regulated EBITDA.

Business Risk: Excellent

Our assessment of DEP's business risk profile reflects the company's lower-risk electric utility operations that benefit from a generally constructive regulatory framework, track record of reliable electric service, and large customer base. The company has some geographic and regulatory diversity given that its operations are concentrated in two states (North and South Carolina). Our assessment also accounts for DEP's generation mix. The company has about 13,000 megawatts (MW) of generation capacity, and its generation mix primarily reflects natural gas, nuclear, and coal. Natural gas-fired sources account for about 45% of DEP's owned generation, with nuclear, and coal-fired sources accounting for 28%, and 27%, respectively. The company's dependency on coal exposes it to environmental risks and its ownership of nuclear generation assets exposes the company to higher operating risks associated with its nuclear-generation fleet.

Peer comparison

Table 1

Duke Energy Progress LLC--Peer Comparison

Industry Sector: Electric

	Duke Energy Progress LLC	**Georgia Power Co.**	**Alabama Power Co.**	**Florida Power & Light Co.**	**Virginia Electric & Power Co.**
Ratings as of Feb. 27, 2020	A-/Stable/A-2	A-/Negative/A-2	A/Negative/A-1	A/Stable/A-1	BBB+/Stable/A-2
	--Fiscal year ended Dec. 31, 2018--				
(Mil. $)					
Revenue	5,699.0	8,420.0	6,032.0	11,786.3	7,619.0
EBITDA	2,465.6	3,694.8	2,540.9	5,967.5	3,494.2
Funds from operations (FFO)	2,216.7	2,901.5	2,114.3	5,010.5	2,795.3
Interest expense	572.9	576.3	465.6	664.0	648.9
Cash interest paid	360.9	493.3	320.6	542.0	570.9
Cash flow from operations	1,650.0	2,787.5	1,874.3	4,165.5	2,816.3
Capital expenditure	2,205.6	3,122.9	2,145.8	5,118.5	2,353.8

Table 1

Duke Energy Progress LLC--Peer Comparison (cont.)

Industry Sector: Electric

	Duke Energy Progress LLC	Georgia Power Co.	Alabama Power Co.	Florida Power & Light Co.	Virginia Electric & Power Co.
Free operating cash flow (FOCF)	(555.6)	(335.4)	(271.4)	(953)	462.5
Discretionary cash flow (DCF)	(730.6)	(1,731.4)	(1,070.6)	(1,453)	(1.5)
Cash and short-term investments	23.0	4.0	313.0	112.0	29.0
Debt	9,257.6	15,464.0	8,655.4	12,906.5	12,751.4
Equity	8,441.0	14,323.0	7,725.5	21,014.0	13,047.0
Adjusted ratios					
EBITDA margin (%)	43.3	43.9	42.1	50.6	45.9
Return on capital (%)	7.6	9.1	10.3	10.4	8.6
EBITDA interest coverage (x)	4.3	6.4	5.5	9.0	5.4
FFO cash interest coverage (x)	7.1	6.9	7.6	10.2	5.9
Debt/EBITDA (x)	3.8	4.2	3.4	2.2	3.6
FFO/debt (%)	23.9	18.8	24.4	38.8	21.9
Cash flow from operations/debt (%)	17.8	18.0	21.7	32.3	22.1
FOCF/debt (%)	(6.0)	(2.2)	(3.1)	(7.4)	3.6
DCF/debt (%)	(7.9)	(11.2)	(12.4)	(11.3)	(0.0)

Source: S&P Global Ratings.

Financial Risk: Significant

We assess DEP's financial measures using our medial volatility table, reflecting the company's lower-risk vertically integrated electric operations and management of regulatory risk. Our base-case scenario includes capital spending of averaging about $2.3 billion annually throughout our forecast. In addition, our forecast incorporates assumed dividends to the parent averaging about $675 million annually beginning in 2020. After incorporating the recent South Carolina rate case, pending North Carolina rate case, the effects of U.S. tax reform, and storm cost securitization, we expect DEP's financial measures will remain consistent with the higher end of the range for the significant financial risk profile category. Specifically, we expect FFO to debt to average about 21%-22%. Furthermore, given the DEP's elevated capital spending, we expect negative discretionary flow throughout our forecast period, indicative of its external funding needs.

Financial summary

Table 2

Duke Energy Progress LLC--Financial Summary

Industry Sector: Electric

	--Fiscal year ended Dec. 31--				
	2019	2018	2017	2016	2015
(Mil. $)					
Revenue	5,957.0	5,699.0	5,129.0	5,277.0	5,290.0
EBITDA	2,826.1	2,465.6	2,441.5	2,226.4	2,069.6
Funds from operations (FFO)	2,481.9	2,216.7	2,032.5	2,209.8	1,988.7
Interest expense	576.2	572.9	547.0	506.6	463.8
Cash interest paid	374.2	360.9	350.0	303.6	277.8
Cash flow from operations	1,848.8	1,650.0	1,228.4	1,963.3	1,613.1
Capital expenditure	2,080.0	2,205.6	1,703.7	1,725.7	1,655.2
Free operating cash flow (FOCF)	(231.2)	(555.6)	(475.3)	237.6	(42.1)
Discretionary cash flow (DCF)	(231.2)	(730.6)	(599.3)	(62.4)	(42.1)
Cash and short-term investments	22.0	23.0	20.0	12.0	15.0
Gross available cash	22.0	23.0	20.0	12.0	15.0
Debt	10,251.4	9,257.6	8,162.0	7,898.6	8,960.3
Equity	9,246.0	8,441.0	7,949.0	7,358.0	7,059.0
Adjusted ratios					
EBITDA margin (%)	47.4	43.3	47.6	42.2	39.1
Return on capital (%)	8.3	7.6	9.6	8.5	8.4
EBITDA interest coverage (x)	4.9	4.3	4.5	4.4	4.5
FFO cash interest coverage (x)	7.6	7.1	6.8	8.3	8.2
Debt/EBITDA (x)	3.6	3.8	3.3	3.5	4.3
FFO/debt (%)	24.2	23.9	24.9	28.0	22.2
Cash flow from operations/debt (%)	18.0	17.8	15.0	24.9	18.0
FOCF/debt (%)	(2.3)	(6.0)	(5.8)	3.0	(0.5)
DCF/debt (%)	(2.3)	(7.9)	(7.3)	(0.8)	(0.5)

Source: S&P Global Ratings.

Liquidity: Adequate

As of December 2019, we assess DEP'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. DEP's liquidity benefits from stable cash flow generation, and ample availability under the parent's master credit facilities, which totals $8 billion. In addition, we use maintenance capital spending, recognizing that DEP has the ability to reduce capital spending in times of stress. Furthermore, DEP meets our other requirements for a liquidity assessment of adequate, including having well-established and solid relationships with multiple banks, and a satisfactory standing in credit markets. Overall, we expect DEP can withstand a low-probability, high impact event, while managing to meet its external funding needs.

Principal Liquidity Sources	Principal Liquidity Uses
• Cash FFO of about $1.9 billion; • Credit facilities of $1.25 billion; and • Minimal cash.	• Current long-term debt maturities of approximately $1 billion over the next 12 month; • Assumed maintenance capital spending of about $1 billion; and • Assumed dividends of roughly $675 million over the next 12 months.

Debt maturities

As of December 2019

- 2020: $700 million
- 2021: $925 million
- 2022: $500 million
- 2023: $310 million

Covenant Analysis

Compliance expectations

We expect DEP to comply with the terms of its covenant agreements throughout our forecast period, even with a 10% decline in EBITDA.

Requirements

DEP is part of Duke Energy's master credit facility. The master credit facility includes a covenant that requires DEP's total-debt-to-total-capitalization ratio to not exceed 65%.

Environmental, Social, And Governance

About 70% of DEP's total electric generation fleet capacity of roughly 13 gigawatts (GW) are fossil fuel-based (45% natural gas; 27% coal), 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. 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 though 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. Overall, we assess DEP'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 DEP's ability to deliver safe and reliable electric services to customers as a positive social factor. And DEP's board of directors are capably engaged in risk oversight on behalf of all stakeholders

Group Influence

Our rating on DEP incorporates our view of the company as a core subsidiary of Duke Energy, meaning that we view DEP as highly unlikely to be sold and as integral to the group's overall strategy. In addition, DEP is closely linked to Duke Energy's name and reputation, and it has strong long-term support of the group's senior management. Because we assess DEP as not sufficiently insulated from its parent, the issuer credit rating on the company is in line with Duke's 'a-' group credit profile.

Issue Ratings - Subordination Risk Analysis

Capital structure

DEP's capital structure consists of just over $9 billion, reflecting a mix of first-mortgage bonds and senior unsecured long-term debt.

Analytical conclusions

We rate DEP's senior unsecured debt the same as our issuer credit rating on the company because it is unsecured debt of a qualifying investment-grade regulated utility.

Issue Ratings - Recovery Analysis

- We assign recovery ratings to first-mortgage bonds (FMB), which, depending on the rating category and the extent of the collateral coverage, can result in issue ratings being notched above an issuer credit rating on a utility.
- DEP's FMBs benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently

acquired. Collateral coverage of over 1.5x supports a recovery rating of '1+' and an issue rating one notch above the issuer credit rating.

Reconciliation

Table 3

Reconciliation Of Duke Energy Progress LLC Reported Amounts With S&P Global Ratings' Adjusted Amounts (Mil. $)

	--Fiscal year ended Dec. 31, 2019--						
Duke Energy Progress, LLC reported amounts							
	Debt	**EBITDA**	**Operating income**	**Interest expense**	**S&P Global Ratings' adjusted EBITDA**	**Cash flow from operations**	**Capital expenditure**
	8817	2323	1168	306	2826.126761	1823	2108
S&P Global Ratings' adjustments							
Cash taxes paid	--	--	--	--	30.0	--	--
Cash taxes paid: Other	--	--	--	--	--	--	--
Cash interest paid	--	--	--	--	(331.0)	--	--
Reported lease liabilities	698.0	--	--	--	--	--	--
Operating leases	--	69.0	15.2	15.2	(15.2)	53.8	--
Postretirement benefit obligations/deferred compensation	5.5	--	--	--	--	--	--
Accessible cash and liquid investments	(22.0)	--	--	--	--	--	--
Capitalized interest	--	--	--	28.0	(28.0)	(28.0)	(28.0)
Share-based compensation expense	--	21.1	--	--	--	--	--
Asset retirement obligations	752.9	227.0	227.0	227.0	--	--	--
Nonoperating income (expense)	--	--	129.0	--	--	--	--
EBITDA: Other income/(expense)	--	186.0	186.0	--	--	--	--
Depreciation and amortization: Impairment charges/(reversals)	--	--	12.0	--	--	--	--
Depreciation and amortization: Other	--	--	(186.0)	--	--	--	--
Total adjustments	1,434.4	503.1	383.2	270.2	(344.2)	25.8	(28.0)
S&P Global Ratings' adjusted amounts							
	Debt	**EBITDA**	**EBIT**	**Interest expense**	**Funds from operations**	**Cash flow from operations**	**Capital expenditure**
	10,251.4	2,826.1	1,551.2	576.2	2,481.9	1,848.8	2,080.0

Source: S&P Global Ratings.

Ratings Score Snapshot

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:** 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-
- **Entity status within group:** Core

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

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	**a-**	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of February 28, 2020)*

Duke Energy Progress, LLC	
Issuer Credit Rating	A-/Stable/A-2
Preferred Stock	BBB
Senior Secured	A
Issuer Credit Ratings History	
20-Nov-2019	A-/Stable/A-2
20-May-2019	A-/Negative/A-2
12-Jan-2017	A-/Stable/A-2
27-Oct-2015	A-/Negative/A-2
02-Apr-2015	A-/Stable/A-2

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.