

Credit Ratings

HIGHLIGHTS

- The industry’s average parent company credit rating in 2022 held at BBB+ for the ninth straight year. Ratings activity remained slow with only 35 total actions — 25 upgrades and 10 downgrades — affecting both parents and subsidiaries. The only S&P ratings change at the parent company level in 2022 was a single downgrade.
- Industry credit quality has improved over the past decade, although it experienced a slight decline, in aggregate, in recent years even as the parent-company average held steady.
- The three major rating agencies stressed similar themes in their outlooks for 2023. The agencies cited inflation, rising interest rates and higher natural gas prices along with related customer bill impacts as key themes they are watching. S&P maintained a negative outlook, Moody's revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral.

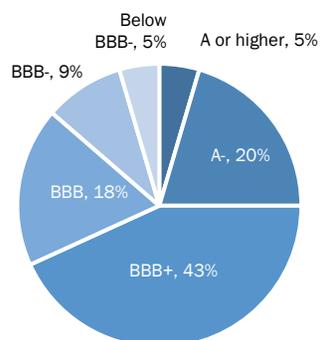
COMMENTARY

The industry’s average parent company credit rating in 2022 remained at BBB+ for the ninth straight year, although one parent-level downgrade caused a slight weakening in aggregate holding company credit quality. There were only 35 total actions — 25 upgrades and 10 downgrades — affecting both parents and subsidiaries. This pace was far below the 73-action annual average of the previous ten calendar years and is the lowest annual total in our historical dataset (back to 2000).

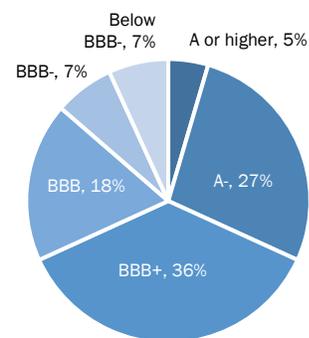
On December 31, 2022, 77.3% of parent company ratings outlooks were “stable”, 9.1% were “positive” or “watch-positive”, and 2.3% were “developing”. Only 11.4% of out-

I. S&P Utility Credit Ratings Distribution

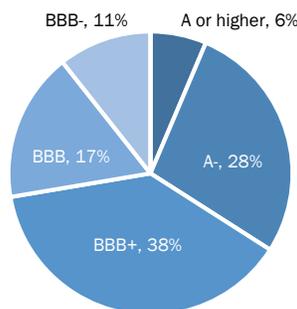
U.S. Investor-Owned Electric Utilities (parent level only)



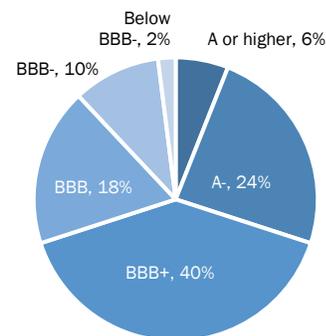
At 12/31/2022



At 12/31/2020



At 12/31/2018

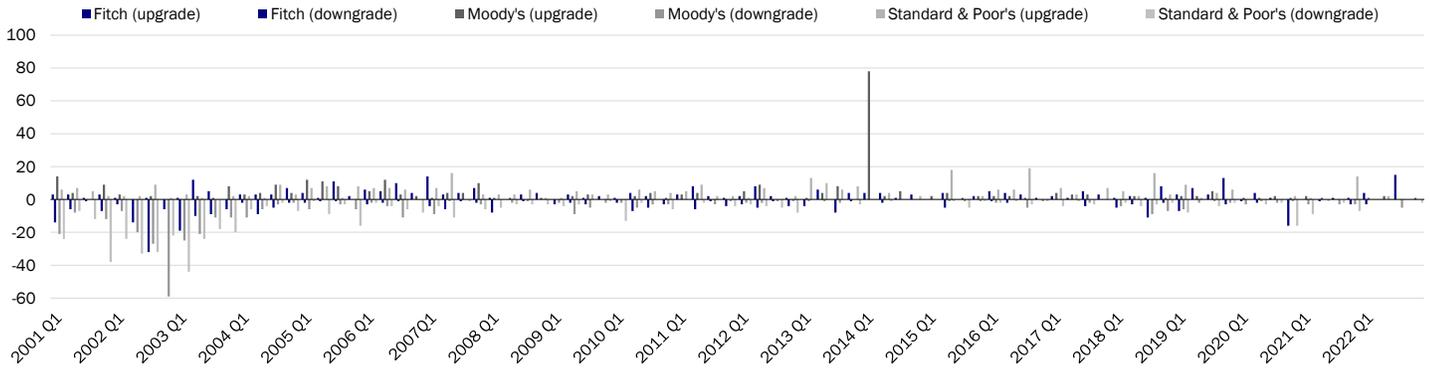


At 12/31/2016

Note: Rating applies to utility holding company entity.
Source: Standard & Poor’s, S&P Global Market Intelligence, and EEI Finance Dept.

II. Credit Rating Agency Upgrades and Downgrades

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)



	2017				2018				2019				2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Fitch (upgrade)	2	1	5	3	1	2	1	8	3	7	3	13	0	4	1	0	0	0	1	1	4	0	15	0
Fitch (downgrade)	0	0	-4	0	-5	-3	-11	-2	-7	0	0	-3	-1	-2	0	-16	0	-1	0	-3	-3	0	0	0
Moody's (upgrade)	4	3	3	0	0	2	0	1	2	2	5	0	1	1	2	1	2	1	0	0	1	2	0	1
Moody's (downgrade)	0	0	-2	0	-4	0	-9	-7	-6	-2	-1	-2	-3	-1	-2	-1	-3	0	-3	-3	0	0	-5	0
S&P (upgrade)	7	3	0	7	5	2	16	3	9	1	4	6	0	0	0	2	1	0	0	14	0	2	0	0
S&P (downgrade)	-4	-1	-3	0	-2	-4	-3	-2	-8	0	-4	-2	0	-3	-2	-16	-9	-1	-2	-7	0	0	0	-2

Note: Chart depicts the number of upgrades / downgrades for all rated companies, including subsidiaries, during the quarter.
 Source: S&P Global Market Intelligence and EEI Finance Dept.

III. Total Ratings Actions

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)

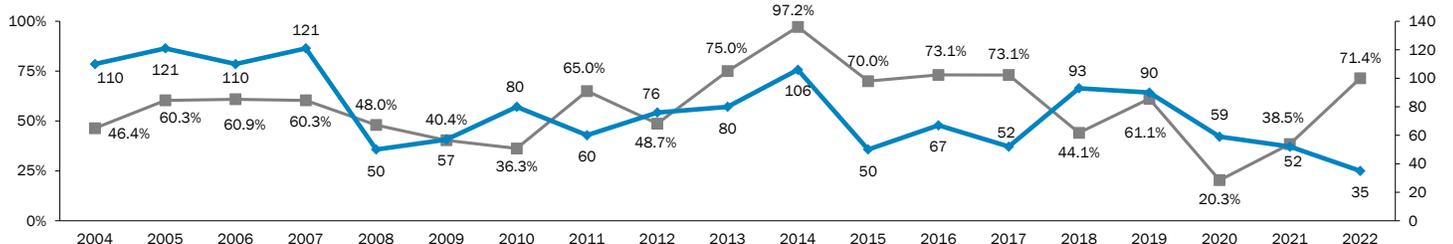
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fitch	34	22	31	41	17	14	24	25	26	23	14	11	16	15	33	36	24	6	22
Moody's	42	46	39	32	6	23	20	11	20	17	85	12	13	12	23	20	12	12	9
S&P	34	53	40	48	27	20	36	24	30	40	7	27	38	25	37	34	23	34	4
Total	110	121	110	121	50	57	80	60	76	80	106	50	67	52	93	90	59	52	35

Source: S&P Global Market Intelligence and EEI Finance Dept.

IV. Direction of Ratings Actions

U.S. Investor-Owned Electric Utilities (parent and subsidiary companies)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Upgrades	51	73	67	73	24	23	29	39	37	60	103	35	49	38	41	55	12	20	25
Downgrades	59	48	43	48	26	34	51	21	39	20	3	15	18	14	52	35	47	32	10
% Upgrades	46.4%	60.3%	60.9%	60.3%	48.0%	40.4%	36.3%	65.0%	48.7%	75.0%	97.2%	70.0%	73.1%	73.1%	44.1%	61.1%	20.3%	38.5%	71.4%
Total Actions	110	121	110	121	50	57	80	60	76	80	106	50	67	52	93	90	59	52	35



Source: Fitch Ratings, Moody's, Standard & Poor's

looks were “negative” or “watch-negative”; that was down from 22.7% at year-end 2021 and the lowest negative share at any quarter end since Q4 2013.

Electric utility industry credit quality generally improved over the past decade. The industry’s average parent level rating has held at BBB+ since increasing from BBB in 2014. A closer look at the underlying calculation of this average shows a steady strengthening from 2013 through 2018, followed by a slight decline in 2019, 2020, 2021, and 2022. Across the larger universe that includes both parents and subsidiaries, the five-year period 2013 through 2017, along with 2022, produced the six highest upgrade percentages in our 23 years of historical data. Moreover, upgrades outnumbered downgrades in seven of the past ten calendar years with an annual average upgrade percentage of 62% over the decade.

EI captures upgrades and downgrades at both the parent and subsidiary levels. The industry’s average credit rating and outlook are the unweighted averages of all Standard & Poor’s (S&P) parent holding company ratings and outlooks. However, our upgrade/downgrade totals reflect all actions by the three major ratings agencies including both parent holding companies as well as individual subsidiaries. Our universe of 44 U.S. parent company electric utilities on December 31, 2022 included 39 that are publicly traded and 5 that are either a subsidiary of an independent power producer, a subsidiary of a foreign owned company, or owned by an investment firm.

The three major rating agencies stressed similar themes in their outlooks for 2023. S&P maintained a negative outlook, Moody’s revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral. All three agencies cited higher natural gas prices, inflation, rising interest rates, and increased capital spending as key concerns. While the agencies noted regulatory relations are broadly constructive, all said that utilities’ efforts to manage the regulatory risk associated with residential customer affordability issues will be a key area of scrutiny.

Credit Actions at Parent Level

Parent-level ratings actions in 2022 by S&P included only one downgrade. By comparison, there were three downgrades and one upgrade in 2021, three downgrades, one upgrade and one reinstatement in 2020, and five downgrades and one upgrade in 2019.

On December 21, S&P downgraded DPL Inc. and subsidiary Dayton Power and Light (DP&L) to BB from BB+. Dayton Power & Light received an order from the Public Utilities Commission of Ohio (PUCO) that authorized it to increase its distribution rates by \$75 million. However, the increase will not go into effect until the company has a new Electric Security Plan (ESP) in place, which is not anticipated until mid-2023. S&P said the companies will be adversely impacted by cash flow pressures due to the delay.

Ratings Activity Remains Slow in 2022

The 35 rating changes during 2022 (upgrades plus downgrades), 17 fewer than in 2021, was the lowest total of any year back to our dataset’s inception in 2000. By comparison, there were 59 actions in 2020, 90 in 2019, and an annual average of 73 over the previous decade. The industry’s 25 upgrades in 2022 versus 10 downgrades produced an upgrade percentage of 71.4%, up from 38.5% in 2021 and 20.3% in 2020. Upgrades outnumbered downgrades in seven of the past ten calendar years, with an annual average upgrade percentage of 62%.

The Credit Rating Agency Upgrades and Downgrades table presents quarterly activity by all three ratings agencies. Following are full-year totals for 2022:

- Fitch (19 upgrades, 3 downgrades)
- Moody’s (4 upgrades, 5 downgrades)
- Standard & Poor’s (2 upgrades, 2 downgrades)

Upgrades in 2022

Many of the year’s upgrades came after favorable regulatory outcomes or strengthened financial metrics under new ownership. Upgrades were also driven by the use of asset sale proceeds to reduce parent company debt.

On January 14, Fitch upgraded Pepco Holdings, Pepco, and Atlantic City Electric to BBB+ from BBB due to improved credit profiles from supportive regulatory decisions.

On January 28, Moody’s upgraded Entergy Texas to Baa2 from Baa3, following improved legislative and regulatory support. Moody’s cited as reasons for the upgrade a recent authorization to securitize \$250 million of storm costs, expedited cost recovery for a combined-cycle plant that recently began operations, and an upcoming rate case proceeding.

On March 30, Fitch upgraded Public Service Company of North Carolina (PSNC) to A- from BBB+ citing its strengthened financial condition as a result of equity contributions under Dominion’s ownership since 2019 and a favorable recent rate case outcome. The North Carolina commission approved a settlement with an ROE of 9.6% and equity capitalization of 51.6%. This was the first PSNC rate case under Dominion ownership. Fitch also cited strong service territory customer growth that support improved credit metrics.

On May 27, S&P upgraded PPL Electric Utilities (PPLU), the Pennsylvania transmission and distribution subsidiary of PPL, to A from A-. The upgrade reflects S&P’s view that PPLU’s financial performance, funding arrangements and operational independence are sufficient to support this rating.

On June 2, S&P Global Ratings raised the issuer credit rating of Narragansett Electric Co. (NECO) by one notch to A-. S&P cited the resolution of legal issues in Rhode Is-

V. S&P Utility Credit Rating Distribution by Company Category

U.S. Investor-Owned Electric Utilities (parent level only)

	12/31/2017		12/31/2018		12/31/2019		12/31/2020		12/31/2021		12/31/2022	
REGULATED												
A or higher	2	6%	1	3%	1	3%	1	3%	1	3%	1	3%
A-	12	34%	11	32%	11	31%	11	32%	8	23%	8	22%
BBB+	10	29%	11	32%	11	31%	10	29%	14	40%	15	42%
BBB	7	20%	7	21%	8	23%	7	21%	7	20%	7	19%
BBB-	4	11%	4	12%	2	6%	2	6%	3	9%	3	8%
Below BBB-	0	0%	0	0%	2	6%	3	9%	2	6%	2	6%
Total	35	100%	34	100%	35	100%	34	100%	35	100%	36	100%
MOSTLY REGULATED												
A or higher	1	7%	2	15%	1	10%	1	10%	1	11%	1	13%
A-	2	14%	2	15%	1	10%	1	10%	1	11%	1	13%
BBB+	7	50%	7	54%	7	70%	6	60%	5	56%	4	50%
BBB	2	14%	1	8%	0	0%	1	10%	1	11%	1	13%
BBB-	1	7%	1	8%	1	10%	1	10%	1	11%	1	13%
Below BBB-	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	14	100%	13	100%	10	100%	10	100%	9	100%	8	100%

Sources: Standard & Poor's, S&P Global Market Intelligence, and EEI Finance Dept.

land that cleared the way for PPL to finalize its acquisition of Narragansett Electric. S&P assessed NECO's business risk profile as excellent due to supportive regulatory mechanisms in Rhode Island as well as electric transmission assets that benefit from a very supportive FERC regulatory framework.

On June 6, Moody's upgraded PPL Corporation to Baa1 from Baa2, based on its improved business risk profile; PPL reduced parent company debt by \$3.5 billion using proceeds from the sale in 2021 of its U.K. utility business, Western Power Distribution, to National Grid for net cash proceeds of \$10.4 billion. Moody's stable outlook reflects PPL's new business mix with its four U.S. utilities all operating in supportive regulatory environments. Moody's also upgraded Narragansett Electric Company to A3 from Baa1.

On July 22, Fitch upgraded FirstEnergy (FE) to BBB from BB+ based on FE's completed sale in May 2022 of a 20% ownership interest in FirstEnergy Transmission for \$2.4 billion, FE's issuance of \$1 billion of new equity, and a regulatory settlement in Ohio that provide rate certainty through May 2024. FirstEnergy used proceeds from its asset sales and equity issuance to paydown \$2.4 billion of parent company debt. Fitch also raised the rating for fourteen subsidiaries.

On December 15, Moody's upgraded Dominion Energy South Carolina (DESC) to Baa1 from Baa2. The upgrade followed a series of rate orders by the South Carolina Public Service Commission (SCPSC) in 2022 that will help DESC recover higher costs, including under-recovered fuel balanc-

es, and improve cash flow. The SCPSC approved a settlement in December between DESC and various intervenors that provides \$167 million of additional revenue to improve DESC's fuel cost recovery.

Downgrades in 2022

Many downgrades focused on increased debt and cash flow pressures that impacted credit metrics. Slow recovery of planned capital expenditures also drove several downgrades. Project delays related to a large nuclear project were cited too.

On January 14, Fitch downgraded Exelon to BBB from BBB+ due to higher leverage after the company's separation from its unregulated generation subsidiary, despite a resulting improved risk profile. Fitch observed that an expected equity issuance will not offset the loss of cash from the generation subsidiary and will result in increased parent debt.

On February 22, Fitch downgraded Georgia Power Company to BBB from BBB+ following an announced three- to six-month delay of the projected in-service dates for Vogtle nuclear units 3 and 4. The downgrade reflects continued uncertainty regarding the completion schedule and remaining costs for these nuclear generating facilities, with Georgia Power bearing a larger portion of cost increases under a 2018 modified co-owner agreement.

On March 24, Fitch downgraded NorthWestern Corporation to BBB from BBB+, primarily due to weaker credit metrics from expected regulatory lag during a period of extensive capital expenditures. The company's credit metrics

are being pressured by a challenging regulatory framework, which is largely backward-looking, and a series of unfavorable rulings by the Montana commission that deny or delay recovery of expenses.

On July 6, Moody's downgraded IDACORP to Baa2 from Baa1 and subsidiary Idaho Power Company (IPC) to Baa1 from A3. Approximately 90% of IDACORP's cash flow is generated by IPC. Moody's observed that credit metrics would improve with more timely rate relief through riders or cost tracking mechanisms, quicker asset recovery via depreciation rates, and more frequent rate case filings. IPC's last rate increase under a general rate review occurred in 2011.

On August 22, Moody's downgraded AEP subsidiary Ohio Power Company to Baa1 from A3. Moody's cited weakened credit metrics from increased debt used to finance Ohio Power's significant investments in transmission and distribution infrastructure. Ohio Power's cash flow has also been negatively impacted by the expiration of legacy riders associated with the transition to competition in Ohio.

On September 13, Moody's downgraded the ratings of First Energy subsidiaries Cleveland Electric Illuminating Company (to Baa3 from Baa2) and Toledo Edison (to Baa2 from Baa1). Moody's said the companies will be adversely impacted by cash flow pressures caused by customer refunds stipulated in a 2021 regulatory settlement in Ohio. Both companies are expected to file rate cases by May 2024, when their current Electric Security Plans (ESP) expire.

Ratings by Company Category

Table V, S&P Utility Credit Ratings Distribution by Company Category, shows the distribution of credit ratings over time by company category (Regulated, Mostly Regulated and Diversified) for the investor-owned electric utilities. The Diversified category was eliminated in 2017 due to its dwindling number of companies.

Ratings are based on S&P's long-term issuer ratings at the holding company level, with only one rating assigned per company. On December 31, 2022, the average rating for both the Regulated and Mostly Regulated categories was BBB+.

Rating Agency Credit Outlooks

The three major ratings agencies held similar utility industry credit outlooks as 2023 began. S&P maintained a negative outlook, Moody's revised its U.S. regulated utility outlook to negative from stable, and Fitch revised its North American utilities outlook to deteriorating from neutral. The agencies cited inflation, rising interest rates and higher natural gas prices and related customer bill impacts as key themes they are watching. It should be noted that the groups of underlying companies vary slightly across the three agency outlooks.

VI. Credit Ratings Distribution

Investment Grade	Moody's	S&P	Fitch
	Aaa	AAA	AAA
	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
	A1	A+	A+
	A2	A	A
	A3	A-	A-
	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
Speculative Grade	Moody's	S&P	Fitch
	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
	B1	B+	B+
	B2	B	B
	B3	B-	B-
	Caa1	CCC+	CCC+
	Caa2	CCC	CCC
	Caa3	CCC-	CCC-
	Ca	CC	CC
	C	C	C
Default	Moody's	S&P	Fitch
	C	D	D

Source: Fitch Ratings, Moody's, Standard & Poor's

Standard & Poor's (S&P)

Published in late January 2023, S&P's report "Industry Top Trends 2023 – North America Regulated Utilities" maintained the agency's negative industry outlook. The report noted that downgrades outpaced upgrades for the third consecutive year. While the percentage of negative outlooks decreased to 12% from 20% at year-end 2021, S&P stated that prolonged inflation or a deeper-than-expected recession could harm the industry's credit quality in 2023. Only 7% of the industry had a positive outlook.

S&P's base case assumes inflation will moderate during 2023 and the industry's credit measures will generally remain stable. However, persistent inflation could put additional pressure on customer bills and decrease regulatory support.

The report also cited potential risks related to the industry's aggressive reduction of greenhouse gas (GHG) emissions. S&P noted industry capital spending in 2022 reached an all-time high with an even higher total expected in 2023 with future investment focused on renewables and related infrastructure. As bills increase, regulators may ask the industry to slow the pace of the energy transition, possibly delaying the achievement of net-zero carbon emissions. In addition, large renewable projects (such as offshore wind) could become more challenging as timelines and budgets are affected by supply chain delays and rising interest rates. While much of the S&P report focused on the increased regulatory scrutiny that often accompanies higher customer bills, it also noted the average electric bill represents only about 2.5% of after-tax household income.

Moody's

In its "2023 Outlook – Regulated Electric and Gas Utilities – US" (released November 2022), Moody's revised its outlook for the sector to negative from stable. The report cited risks related to inflation, rising interest rates and higher natural gas prices as areas of concern. These developments could lead to customer affordability challenges and increased uncertainty related to the timely recovery of fuel and purchased power costs. The report also stated that capital spending and dividends will likely be sustained at a steady rate, possibly weighing on near-term credit metrics. The sector's aggregate industry funds from operations (FFO) to debt ratio will likely be 14% in 2023, according to the report, but may fall below this level if cost recovery is delayed.

Moody's listed several factors that could change its outlook back to stable: 1) if the sector's regulatory support remains intact, 2) if natural gas prices settle at a level that allows most utilities to fully recover fuel and purchased power costs within 12 months, 3) if inflation moderates and interest rates stabilize, and 4) if the sector's aggregate FFO-to-debt ratio remains between 14% and 15%. Factors that

could change its outlook to positive were: 1) if utility regulation turns broadly more credit supportive resulting in quicker cash flow recovery, and 2) if the sector's aggregate FFO-to-debt ratio rises above 17% on a sustained basis.

Fitch Ratings

In its "North American Utilities, Power & Gas Outlook 2023" (released December 2022), Fitch Ratings revised its outlook for the sector to deteriorating from neutral. The move primarily reflects growing cost pressures for utilities due to higher commodity prices, inflation, and rising interest rates. These factors, combined with high capital expenditures and storm restoration costs from extreme weather, are driving customer bills higher. Fitch noted that deferred fuel balances are increasing, which may affect credit metrics as utilities try to spread the recovery of these costs over an extended time period to mitigate the impact on customer bills.

The report also noted positive tailwinds that could offset these concerns. Retail electricity sales continue to show resilience and remain above pre-pandemic levels. Fitch expects authorized ROEs to start trending up in reaction to the recent rise in interest rates. Many utilities are increasingly using tools such as securitization for under-recovered fuel balances. The Inflation Reduction Act provides tax incentives for clean generation that may offset inflationary bill pressures. Finally, many companies are using asset monetization, such as the sale of non-regulated renewable businesses and the partial or full sale of regulated subsidiaries, to replace equity needs.

With 88% of companies at a stable ratings outlook, Fitch expects little ratings movement in 2023. The agency noted that higher-than-expected natural gas prices remains the largest risk to credit metrics since increases in deferred fuel balances can impair the timely recovery of capital expenditures. ■