

High Grade Utilities & Power

The Investment Grid – Weekly Recap

Industry Overview

IG Utilities relative performance

The IG Utility Index outperformed the broader IG market for the week ending March 8, 2024, returning 0.92% vs. 0.86% for the ICE BofA US IG Index. On average, OpCo and HoldCo spreads tightened by 1 bp each.

This week's best and worst performers

The best performing OpCo bonds this week were Dominion Energy South Carolina 6.625% secured notes due '32, Evergy Kansas Central 3.25% secured notes due '25, and Entergy Louisiana 4.44% secured notes due '26. The worst performing OpCo bonds this week were Oncor Electric Delivery Co. 2.95% secured notes due '25, Appalachian Power Co. 6.70% senior notes due '37, and CenterPoint Energy Resources Corp. 6.625% senior notes due '37.

The best performing HoldCo bonds this week were CMS Energy Corp. 2.95% senior notes due '27, Xcel Energy 6.50% senior notes due '36, and Black Hills Corp. 3.95% senior notes due '26. The worst performing HoldCo bonds this week were Puget Energy 6.724% secured notes due '36, Xcel Energy 3.35% senior notes due '26, and Southern Co. 3.75% junior subordinated notes due '26.

New Issuance

There was \$2.2 Bn in new issue this week led by Entergy Louisiana which came to market for \$1,200 Mn in FMBs. Utilities have issued ~\$37 Bn of bonds YTD.

12 March 2024

High Grade Credit
United States
Electric Utilities

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Top headlines, week ending March 8, 2024

Xcel Energy disclosed that equipment was likely involved in Smokehouse Creek Fire

On March 7, Xcel Energy released a statement acknowledging that its equipment was likely involved in the ignition of the Smokehouse Creek fire currently active in the Texas Panhandle. As of March 8, the fire has burned ~1 million acres and is 87% contained making it the largest wildfire in the state's history. Two fatalities have been recorded so far and reports estimate that nearly 500 structures have been destroyed. The company disputes claims that it acted negligently in maintaining and operating its infrastructure. Further, Xcel does not believe its facilities were involved in causing the Windy Deuce fire, a nearby fire burning in Borger County.

Iberdrola announces takeover bid of Avangrid

On March 7, Iberdrola disclosed a \$2.49 billion or \$34.25 offer to acquire all outstanding Avangrid (AGR) shares that the holding company does not currently own. Iberdrola currently owns 81.61% of AGR shares. The offer price represents a ~10% premium to AGR's stock price at close on March 6. Execution of a definitive agreement with AGR is subject to the completion of confirmatory due diligence, the approval of both companies' boards and regulatory authorization.

Dominion Energy closes sale of Ohio Natural Gas Distribution Company

On March 7, Dominion announced that it closed the sale of its Ohio Natural Gas distribution business – The East Ohio Gas Company – to Enbridge for a total transaction value of \$6.6 billion, including assumed indebtedness.

Rating actions, week ending March 8, 2024

XEL: S&P revises outlook to negative on increasing wildfire risks; ratings affirmed

The negative outlook factors expected wildfire liabilities against Xcel due to ongoing wildfires in the Texas Panhandle in conjunction with legal risk the company faces at its Colorado subsidiary in the wake of the Marshall Fire. S&P foresees XEL's credit quality deteriorating over the next 12 months due to mounting business risk or weaker financial measures. S&P notes, while XEL subsidiary Southwestern Public Service Co.'s (SPS) involvement in the fires is unclear, the scale and severity of the fires illustrates higher wildfire risk for SPS and its parent. The rating agency suggests liabilities over the \$500 million in insurance coverage carried by XEL would likely be funded with incremental debt. To account for this negative series of events, S&P has raised XEL's downgrade threshold to 16% from 15% and expects the company to average FFO to debt of 16% through 2026, excluding any potential unrecovered costs related to Texas wildfires.

AEP: S&P downgrades American Electric Power Inc. to 'BBB+' on weak financial measures, outlook negative

S&P notes AEP's 2023 financial measures were materially weaker than its downgrade threshold for the 'A-' credit rating and that financial performance will remain pressured because of the company's robust capital spending program. As a result, S&P downgraded AEP and subsidiaries by one notch, excluding Kentucky Power Co. The decision to keep the company on negative outlook is also reflective of AEP's elevated spending program that S&P expects to average \$8.8 billion annually through 2026. The agency estimates FFO to debt to be in the 12-15% range through 2026 while the current downgrade threshold is 13%. Lastly, S&P noted it will continue to monitor Icahn Capital's involvement in the company to determine if they are pursuing a creditor-unfriendly agenda.

ES: S&P takes Eversource Energy off CreditWatch on NY selecting its Wind Farm; outlook negative, Aquarion Water Downgraded

The removal off CreditWatch comes after New York selected the Sunrise Wind offshore wind farm project for development – increasing the likelihood that ES will be able to complete its sale of its ownership interest in the project to Ørsted. S&P reaffirmed ES and subsidiaries' credit rating (excluding Aquarion Water Co.) and assigned a negative outlook. The negative outlook reflects ES' minimal headroom above its downgrade threshold combined with the company's remaining offshore wind construction risk, execution risks related to its asset sales, and its ability to manage regulatory risk in Connecticut. S&P projects the company's FFO to debt to average 14% through its forecast period.

IDA: Moody's changes Idacorp and Idaho Power outlooks to negative; affirms ratings

Moody's notes Idaho Power Co.'s (IPC) credit metrics continue to be pressured by both higher capex and slower than expected cash flow growth. Specifically, the utility's CFO pre-WC to debt has been flat at 12% which Moody's evaluates as weak for its Baa1 rating. Moody's estimates that the ratio will remain at ~12% through 2026 and while IPC's first rate case in over 10 years resulted in a constructive outcome, it is insufficient to support a near-term boost to credit metrics. Since Idacorp's credit quality is underpinned by cash flows generated at IPC, any negative rating action on IPC impacts Idacorp's ratings or outlook.

PNW: S&P revises Pinnacle West Capital Corp. outlook to stable from negative on favorable regulatory outcomes; ratings affirmed

The outlook revision to stable from negative comes after a credit supportive order by the Arizona Corporation Commission (ACC) on Arizona Public Service Co.'s (APS) 2022 rate case. The commission authorized a net \$253.4 million electric base-rate increase factoring a 9.55% return on equity and a 0.25% fair value increment. This follows the



company's appeal of its 2019 rate case, which S&P also views as credit supportive. In the appeal, APS was granted the ability to recover \$215.5 million in costs from the installation of the Four Corners selective catalytic reduction. S&P views these outcomes as APS displaying an ability to effectively manage regulatory risk. Under its base case, the rating agency now expects consolidated FFO to debt of 17-19% through 2026.

Utilities vs. IG Index: Performance for week ending March 8, 2024

Exhibit 1: Utilities vs. IG Index

Utilities returned 0.92% vs. 0.86% for the IG Index

Sector	Total Return % 1-wk	Rank	Total Return % YTD	Rank
Telecommunications	1.15%	1	-0.51%	11
Healthcare	1.05%	2	-0.52%	12
Energy	1.02%	3	0.07%	7
Technology & Electronics	0.98%	4	-0.63%	14
Consumer Goods	0.94%	5	-0.58%	13
Media	0.93%	6	-1.35%	18
Utility	0.92%	7	-0.32%	10
Transportation	0.89%	8	-0.97%	17
Retail	0.87%	9	-0.78%	16
Basic Industry	0.86%	10	-0.20%	9
Services	0.84%	11	-0.17%	8
Capital Goods	0.81%	12	-0.66%	15
Insurance	0.79%	13	0.26%	5
Real Estate	0.78%	14	0.34%	4
Banking	0.73%	15	0.75%	1
Financial Services	0.71%	16	0.53%	3
Automotive	0.52%	17	0.61%	2
Leisure	0.43%	18	0.26%	5
IG Index	0.86%		-0.07%	

Source: ICE Data Indices, LLC

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OpCos: Top-10 bond leaders and laggards, week ending March 8, 2024

Leaders

Exhibit 2: OpCo Leaders

Dominion Energy South Carolina 6.625% secured notes were the best performing OpCo bonds this week

Rank	Ticker	Company	Bond	Maturity	Rating	STW	1-Wk Δ STW
1	D	Dominion Energy South Carolina Inc	6.625% Secured due 2032	2/1/32	A2	71	(22)
2	EVRG	Evergy Kansas Central Inc.	3.250% Secured due 2025	12/1/25	A2	52	(22)
3	ETR	Entergy Louisiana LLC	4.440% Secured due 2026	1/15/26	A2	23	(21)
4	PPL	Louisville Gas and Electric Company	5.125% Secured due 2040	11/15/40	A2	124	(21)
5	PCG	Pacific Gas and Electric Company	4.650% Senior due 2028	8/1/28	BBB2	128	(20)
6	SWX	Southwest Gas Corp	5.450% Senior due 2028	3/23/28	BBB1	65	(20)
7	PCG	Pacific Gas and Electric Company	3.300% Senior due 2027	3/15/27	BBB2	93	(19)
8	CMS	Consumers Energy Company	3.950% Secured due 2043	5/15/43	A1	80	(18)
9	SWX	Southwest Gas Corp	3.180% Senior due 2051	8/15/51	BBB1	125	(17)
10	FE	Ohio Edison Company	8.250% Secured due 2038	10/15/38	A2	136	(15)

Source: ICE Data Indices, LLC

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Laggards

Exhibit 3: OpCo Laggards

Oncor Electric Delivery Co. 2.95% secured notes were the worst performing OpCo bonds this week

Rank	Ticker	Company	Bond	Maturity	Rating	STW	1-Wk Δ STW
1	ONCRTX	Oncor Electric Delivery Company LLC	2.950% Secured due 2025	4/1/25	A2	39	52
2	AEP	Appalachian Power Company	6.700% Senior due 2037	8/15/37	A3	174	29
3	CNP	CenterPoint Energy Resources Corp.	6.625% Senior due 2037	11/1/37	A3	160	22
4	BRKHEC	Nevada Power Company	5.375% Secured due 2040	9/15/40	A2	140	15
5	CNL	Cleco Power LLC	6.000% Senior due 2040	12/1/40	BBB1	158	15
6	EVRG	Evergy Metro Inc.	6.050% Senior due 2035	11/15/35	A2	152	15
7	XEL	Northern States Power Company	5.250% Secured due 2035	7/15/35	A1	114	14
8	ETR	Entergy Texas Inc	5.800% Secured due 2053	9/1/53	A3	134	13
9	XEL	Public Service Company of Colorado	4.750% Secured due 2041	8/15/41	A1	137	13
10	XEL	Public Service Company of Colorado	3.600% Secured due 2042	9/15/42	A1	128	13

Source: ICE Data Indices, LLC

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HoldCos: Top-10 bond leaders and laggards, week ending March 8, 2024

Leaders

Exhibit 4: HoldCo Leaders

CMS Energy 2.95% senior notes were the best performing HoldCo bonds this week

Rank	Ticker	Company	Bond	Maturity	Rating	STW	1-Wk Δ STW
1	CMS	CMS Energy Corporation	2.950% Senior due 2027	2/15/27	BBB2	102	(21)
2	XEL	Xcel Energy Inc	6.500% Senior due 2036	7/1/36	BBB1	154	(17)
3	BKH	Black Hills Corporation	3.950% Senior due 2026	1/15/26	BBB1	72	(16)
4	CMS	CMS Energy Corporation	3.600% Senior due 2025	11/15/25	BBB2	72	(16)
5	NRG	NRG Energy Inc.	7.000% Secured due 2033	3/15/33	BBB3	206	(15)
6	AWK	American Water Capital Corp	3.400% Senior due 2025	3/1/25	A3	40	(13)
7	NRG	NRG Energy Inc.	4.450% Secured due 2029	6/15/29	BBB3	163	(13)
8	CNL	Cleco Corporate Holdings LLC	3.375% Senior due 2029	9/15/29	BBB3	198	(11)
9	PSD	Puget Energy Inc	3.650% Secured due 2025	5/15/25	BBB3	82	(10)
10	EIX	Edison International	4.950% Senior due 2025	4/15/25	BBB2	70	(9)

Source: ICE Data Indices, LLC

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Laggards

Exhibit 5: HoldCo Laggards

Puget Energy 6.724% secured notes were the worst performing HoldCo bonds this week

Rank	Ticker	Company	Bond	Maturity	Rating	STW	1-Wk Δ STW
1	PSD	Puget Energy Inc	6.724% Secured due 2036	6/15/36	A2	189	49
2	XEL	Xcel Energy Inc	3.350% Senior due 2026	12/1/26	BBB1	130	36
3	SO	Southern Co.	3.750% Junior subordinated due 2026	9/15/26	BBB3	221	23
4	OGLETH	Oglethorpe Power Corporation Membership	4.200% Secured due 2042	12/1/42	BBB1	183	17
5	PSD	Puget Energy Inc	5.764% Secured due 2040	7/15/40	A2	150	13
6	ETR	Entergy Corporation	3.750% Senior due 2050	6/15/50	BBB2	145	12
7	OGLETH	Oglethorpe Power Corporation Membership	4.550% Secured due 2044	6/1/44	BBB1	166	12
8	XEL	Xcel Energy Inc	4.000% Senior due 2028	6/15/28	BBB1	105	12
9	XEL	Xcel Energy Inc	4.800% Senior due 2041	9/15/41	BBB1	176	11
10	SO	Southern Co.	4.000% Junior subordinated due 2026	1/15/26	BBB3	177	10

Source: ICE Data Indices, LLC

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OpCos: Top-10 bond leaders and laggards YTD

Leaders

Exhibit 6: OpCo Leaders, YTD

Pacific Gas and Electric Co. 3.30% senior notes are the best performing OpCo bonds YTD

Rank	Ticker	Company	Bond	Maturity	Rating	STW	Δ STW YTD
1	PCG	Pacific Gas and Electric Company	3.300% Senior due 2027	3/15/27	BBB2	93	(58)
2	PCG	Pacific Gas and Electric Company	4.650% Senior due 2028	8/1/28	BBB2	128	(47)
3	AEP	Appalachian Power Company	5.800% Senior due 2035	10/1/35	A3	132	(39)
4	CNL	Cleco Power LLC	6.000% Senior due 2040	12/1/40	BBB1	158	(38)
5	FE	Metropolitan Edison Company	4.000% Senior due 2025	4/15/25	BBB1	100	(37)
6	PCG	Pacific Gas and Electric Company	3.450% Secured due 2025	7/1/25	BBB2	89	(34)
7	NGGLN	The Brooklyn Union Gas Company	3.407% Senior due 2026	3/10/26	BBB1	107	(34)
8	EIX	Southern California Edison Company	5.550% Secured due 2037	1/15/37	A3	125	(34)
9	BRKHEC	PacifiCorp.	3.350% Secured due 2025	7/1/25	A2	44	(34)
10	PCG	Pacific Gas and Electric Company	2.950% Senior due 2026	3/1/26	BBB2	99	(32)

Source: ICE Data Indices, LLC

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Laggards

Exhibit 7: OpCo Laggards, YTD

Southern California Edison Co. 6.00% secured notes are the worst performing OpCo bonds YTD

Rank	Ticker	Company	Bond	Maturity	Rating	STW	Δ STW YTD
1	EIX	Southern California Edison Company	6.000% Secured due 2034	1/15/34	A3	115	26
2	SO	Alabama Power Company	3.750% Senior due 2027	9/1/27	A2	61	23
3	PPL	Kentucky Utilities Company	3.300% Secured due 2025	10/1/25	A2	63	21
4	XEL	Southwestern Public Service Company	4.500% Secured due 2041	8/15/41	A3	158	20
5	CNP	CenterPoint Energy Resources Corp.	5.400% Senior due 2033	3/1/33	A3	111	19
6	DUK	Duke Energy Carolinas LLC	2.950% Secured due 2026	12/1/26	A1	32	18
7	EIX	Southern California Edison Company	5.850% Secured due 2027	11/1/27	A3	76	18
8	ONCRTX	Oncor Electric Delivery Company LLC	5.300% Secured due 2042	6/1/42	A2	77	18
9	SO	Georgia Power Company	4.650% Senior due 2028	5/16/28	BBB1	69	18
10	SRE	San Diego Gas & Electric Company	6.125% Secured due 2037	9/15/37	A2	167	17

Source: ICE Data Indices, LLC

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HoldCos: Top-10 bond leaders and laggards YTD

Leaders

Exhibit 8: HoldCo Leaders, YTD

NextEra Energy Capital Holdings 4.80% junior subordinated notes are the best performing HoldCo bonds YTD

Rank	Ticker	Company	Bond	Maturity	Rating	STW	Δ STW YTD
1	NEE	NextEra Energy Capital Holdings Inc	4.800% Junior subordinated due 2027	12/1/27	BBB2	336	(92)
2	NEE	NextEra Energy Capital Holdings Inc	5.650% Junior subordinated due 2029	5/1/29	BBB2	245	(72)
3	SO	Southern Co.	3.750% Junior subordinated due 2026	9/15/26	BBB3	221	(61)
4	SO	Southern Co.	4.000% Junior subordinated due 2026	1/15/26	BBB3	177	(55)
5	DQE	Duquesne Light Holdings Inc.	2.775% Senior due 2032	1/7/32	BBB3	157	(54)
6	DUK	Duke Energy Corp	3.250% Junior subordinated due 2026	10/15/26	BBB3	281	(51)
7	SR	Spire Inc	4.700% Senior due 2044	8/15/44	BBB2	143	(50)
8	CMS	CMS Energy Corporation	4.750% Junior subordinated due 2030	6/1/30	BBB3	227	(49)
9	SO	Southern Co.	5.325% Junior subordinated due 2057	6/21/57	BBB3	135	(40)
10	EXC	Exelon Corporation	7.600% Senior due 2032	4/1/32	BBB2	135	(40)

Source: ICE Data Indices, LLC

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Laggards

Exhibit 9: HoldCo Laggards, YTD

Xcel Energy 3.35% senior notes are the worst performing HoldCo bonds YTD

Rank	Ticker	Company	Bond	Maturity	Rating	STW	Δ STW YTD
1	XEL	Xcel Energy Inc	3.350% Senior due 2026	12/1/26	BBB1	130	64
2	OGLETH	Oglethorpe Power Corporation Membership	6.191% Secured due 2031	1/1/31	A2	200	44
3	XEL	Xcel Energy Inc	4.000% Senior due 2028	6/15/28	BBB1	105	36
4	XEL	Xcel Energy Inc	6.500% Senior due 2036	7/1/36	BBB1	154	27
5	SRE	Sempra	5.500% Senior due 2033	8/1/33	BBB2	137	24
6	PSD	Puget Energy Inc	6.724% Secured due 2036	6/15/36	A2	189	20
7	D	Dominion Energy Inc	4.350% Senior due 2032	8/15/32	BBB2	116	19
8	DUK	Duke Energy Corp	5.750% Senior due 2033	9/15/33	BBB2	126	16
9	SO	Southern Co.	5.200% Senior due 2033	6/15/33	BBB2	120	15
10	ES	Eversource Energy	5.125% Senior due 2033	5/15/33	BBB2	133	15

Source: ICE Data Indices, LLC

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Average spreads by maturity and rating

OpCos

Exhibit 10: Average spread by maturity and rating – OpCos

OpCo spreads tightened by 1 bp this week

OpCos - Average Spreads - Week ending 3/8/24

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	52	93	104	114	94
A	53	103	113	124	99
A-	65	116	126	127	110
BBB+	87	138	139	159	121
BBB	105	165	172	181	143
BBB-	93	n/a	144	n/a	123
Total	69	115	119	127	107

OpCos - 1-week avg. change in STW

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	(2)	2	(3)	(2)	(1)
A	(1)	1	(3)	(1)	(1)
A-	(1)	1	(1)	(0)	(0)
BBB+	(4)	0	2	(2)	(2)
BBB	(5)	2	4	(1)	(2)
BBB-	(2)	n/a	3	n/a	(1)
Total	(2)	1	(2)	(1)	(1)

OpCos - YTD avg. change in STW

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	(5)	6	(5)	4	(1)
A	(7)	2	(8)	0	(4)
A-	(6)	2	(8)	0	(4)
BBB+	(15)	(7)	(9)	(6)	(11)
BBB	(24)	(9)	(24)	(20)	(19)
BBB-	(28)	n/a	(8)	n/a	(13)
Total	(10)	0	(8)	(0)	(5)

Source: ICE Data Indices, LLC

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HoldCos

Exhibit 11: Average spread by maturity and rating – HoldCos

HoldCo spreads tightened by 1 bp this week

HoldCos - Average Spreads - Week ending 3/8/24

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	n/a	n/a	n/a	n/a	n/a
A	n/a	129	113	116	136
A-	62	102	94	122	92
BBB+	73	134	175	147	109
BBB	84	132	134	144	107
BBB-	146	205	n/a	n/a	162
Total	90	136	127	136	113

HoldCos - 1-week avg. change in STW

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	n/a	7	(9)	(2)	4
A	n/a	7	(9)	(2)	4
A-	(2)	(1)	(1)	(4)	(1)
BBB+	(1)	(0)	15	(2)	(1)
BBB	(2)	1	0	(1)	(1)
BBB-	0	(11)	n/a	n/a	(1)
Total	(2)	(0)	1	(2)	(1)

HoldCos - YTD avg. change in STW

Rating	Short	10 year	20 year	30 year	Avg.
AA-	n/a	n/a	n/a	n/a	n/a
A+	n/a	n/a	n/a	n/a	n/a
A	n/a	(21)	(16)	2	(2)
A-	(4)	n/a	(10)	(7)	(4)
BBB+	(4)	(11)	(1)	(1)	(4)
BBB	(8)	7	(14)	(2)	(4)
BBB-	(26)	(26)	n/a	n/a	(26)
Total	(10)	1	(11)	(2)	(6)

Source: ICE Data Indices, LLC

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New utility bond issuance QTD

Exhibit 12: 1Q new utility bond issuance

Utilities have issued ~\$37 Bn in bonds this quarter

Date	Ticker	Issuer	Type	Security	Rating (Moody's/S&P/Fitch)	Amount	Coupon	Maturity	SOT	Δ vs IPT	Book	Comments
1/2/24	D	Virginia Electric & Power	OpCo	Unsec. Notes	A2/BBB+/A	\$500	5.000%	1/15/34	+115	-20	4.4x	
1/2/24	D	Virginia Electric & Power	OpCo	Unsec. Notes	A2/BBB+/A	\$500	5.300%	1/15/54	+127	-28	5.4x	
1/2/24	PPL	PPL Electric Utilities	OpCo	FMBs	A1/A+/NR	\$650	4.850%	2/15/34	+92	-31	5.4x	
1/2/24	CMS	Consumers Energy	OpCo	FMBs	A1/A/A+	\$600	4.650%	5/30/29	+73	-22	3.3x	
1/2/24	DUK	Duke Energy Corp	HoldCo	Unsec. Notes	Baa2/BBB/NR	\$550	4.850%	1/5/27	+75	-25	2.7x	
1/2/24	DUK	Duke Energy Corp	HoldCo	Unsec. Notes	Baa2/BBB/NR	\$550	4.850%	1/5/29	+95	-25	2.7x	
1/3/24	DUK	Duke Energy Carolinas	OpCo	FMBs	Aa3/A/NR	\$575	4.850%	1/15/34	+100	-18	2.5x	
1/3/24	DUK	Duke Energy Carolinas	OpCo	FMBs	Aa3/A/NR	\$425	5.400%	1/15/54	+118	-20	2.4x	Tap
1/3/24	AEE	Union Electric	OpCo	FMBs	A2/A/NR	\$350	5.250%	1/15/54	+123	-22	3.9x	
1/3/24	BRKHEC	PacifiCorp	OpCo	FMBs	A2/A/NR	\$500	5.100%	2/15/29	+120	-30	4.6x	
1/3/24	BRKHEC	PacifiCorp	OpCo	FMBs	A2/A/NR	\$700	5.300%	2/15/31	+140	-30	2.9x	
1/3/24	BRKHEC	PacifiCorp	OpCo	FMBs	A2/A/NR	\$1,100	5.450%	2/15/34	+155	-25	2.6x	
1/3/24	BRKHEC	PacifiCorp	OpCo	FMBs	A2/A/NR	\$1,500	5.800%	1/15/55	+175	-25	2.6x	
1/8/24	EIX	Southern California Edison	OpCo	FMBs	A2/A-/A-	\$500	4.875%	2/1/27	+75	-15	3.2x	
1/8/24	EIX	Southern California Edison	OpCo	FMBs	A2/A-/A-	\$900	5.200%	6/1/34	+120	-18	2.3x	
1/9/24	AQN	Liberty Utilities	OpCo	Unsec. Notes	Baa2 / BBB / BBB+	\$500	5.577%	1/31/29	+185	-30	3.0x	
1/9/24	AQN	Liberty Utilities	OpCo	Unsec. Notes	Baa2 / BBB / BBB+	\$350	5.869%	1/31/34	+195	-25	4.3x	
1/11/24	NGGLN	Niagara Mohawk	OpCo	Unsec. Notes	Baa1/BBB+/NR	\$500	5.290%	1/17/34	+130	-30	3.5x	
1/11/24	NGGLN	Niagara Mohawk	OpCo	Unsec. Notes	Baa1/BBB+/NR	\$700	5.664%	1/17/54	+145	-35	6.4x	
1/16/24	ES	Eversource Energy	HoldCo	Unsec. Notes	Baa2/BBB+/BBB	\$350	5.000%	1/1/27	+100	-25	5.1x	
1/16/24	ES	Eversource Energy	HoldCo	Unsec. Notes	Baa2/BBB+/BBB	\$650	5.500%	1/1/34	+150	-25	4.4x	
1/16/24	ES	Connecticut Light & Power	OpCo	FMBs	A1/A+/A+	\$350	4.650%	1/1/29	+75	-30	5.3x	
1/22/24	BRKHEC	MidAmerican Energy	OpCo	FMBs	Aa2/A/NR	\$600	5.300%	2/1/55	+98	-37	5.5x	Green
1/25/24	EMACN	Tampa Electric	OpCo	Unsec. Notes	A3/BBB+/A	\$500	4.900%	3/1/29	+88	-28	5.0x	
1/29/24	NEE	NextEra Energy Capital Holdings	HoldCo	Unsec. Notes	Baa1/BBB+/A-	\$1,000	4.950%	1/29/26	+65	-20	1.9x	
1/29/24	NEE	NextEra Energy Capital Holdings	HoldCo	Unsec. Notes	Baa1/BBB+/A-	\$600	Float	1/29/26	S+76		1.3x	
1/29/24	NEE	NextEra Energy Capital Holdings	HoldCo	Unsec. Notes	Baa1/BBB+/A-	\$900	4.900%	3/15/29	+95	-20	2.1x	
1/29/24	NEE	NextEra Energy Capital Holdings	HoldCo	Unsec. Notes	Baa1/BBB+/A-	\$1,100	5.250%	3/15/34	+120	-20	2.8x	
1/29/24	NEE	NextEra Energy Capital Holdings	HoldCo	Unsec. Notes	Baa1/BBB+/A-	\$800	5.550%	3/15/54	+125	-28	3.3x	
1/29/24	BRKHEC	Northern Natural Gas	OpCo	Unsec. Notes	A2/A-/NR	\$500	5.620%	2/1/54	+128	-35	9.8x	
2/12/24	DTE	DTE Energy	HoldCo	Unsec. Notes	Baa2/BBB/BBB	\$1,200	5.100%	3/1/29	+103	-22	2.1x	
2/20/24	DTE	DTE Electric	OpCo	FMBs	Aa3/A/A+	\$500	4.850%	12/1/26	+47	-28	3.2x	
2/20/24	DTE	DTE Electric	OpCo	FMBs	Aa3/A/A+	\$500	5.200%	3/1/34	+93	-22	4.8x	
2/20/24	SO	Georgia Power	OpCo	Unsec. Notes	Baa1/BBB+/A-	\$500	5.004%	2/23/27	+62	-28	3.1x	
2/20/24	SO	Georgia Power	OpCo	Unsec. Notes	Baa1/BBB+/A-	\$900	5.250%	3/15/34	+102	-28	4.1x	
2/20/24	AWK	American Water Capital	HoldCo	Unsec. Notes	Baa1/A/NR	\$700	5.150%	3/1/34	+92	-28	3.0x	
2/20/24	AWK	American Water Capital	HoldCo	Unsec. Notes	Baa1/A/NR	\$700	5.450%	3/1/54	+107	-28	3.4x	
2/21/24	NGGLN	Massachusetts Electric	OpCo	Unsec. Notes	Baa1/BBB+/NR	\$400	5.867%	2/26/54	+138	-27	5.3x	
2/22/24	EXC	Exelon Corp	HoldCo	Unsec. Notes	Baa2/BBB/BBB	\$650	5.150%	3/15/29	+88	-33	4.8x	
2/22/24	EXC	Exelon Corp	HoldCo	Unsec. Notes	Baa2/BBB/BBB	\$650	5.450%	3/15/34	+115	-30	5.2x	
2/22/24	EXC	Exelon Corp	HoldCo	Unsec. Notes	Baa2/BBB/BBB	\$400	5.600%	3/15/53	+130	-30	4.5x	Tap
2/22/24	XEL	Northern States Power-MN	OpCo	FMBs	Aa3/A+/A+	\$700	5.400%	3/15/54	+97	-28	3.8x	
2/26/24	PCG	Pacific Gas & Electric	OpCo	FMBs	Baa2/BBB/BBB	\$850	5.550%	5/15/29	+125	-25	3.1x	
2/26/24	PCG	Pacific Gas & Electric	OpCo	FMBs	Baa2/BBB/BBB	\$1,100	5.800%	5/15/34	+140	-30	2.7x	
2/26/24	PCG	Pacific Gas & Electric	OpCo	FMBs	Baa2/BBB/BBB	\$300	6.750%	1/15/53	+170	-25	2.8x	Tap
2/26/24	SO	Southern Company	HoldCo	Unsec. Notes	Baa2/BBB/BBB+	\$400	5.700%	3/15/34	+85	-20	1.8x	Tap
2/26/24	SO	Southern Company	HoldCo	Unsec. Notes	Baa2/BBB/BBB+	\$400	5.500%	3/15/29	+117	-23	2.5x	Tap
2/26/24	XEL	Xcel Energy	HoldCo	Unsec. Notes	Baa1/BBB+/BBB+	\$800	5.500%	3/15/29	+125	-20	1.8x	
2/26/24	EXC	Potomac Electric Power Co.	OpCo	FMBs	A2/A/A	\$375	5.200%	3/15/34	+95	-25	3.7x	
2/26/24	EXC	Potomac Electric Power Co.	OpCo	FMBs	A2/A/A	\$300	5.500%	3/15/34	+110	-25	5.0x	
2/26/24	CNP	CenterPoint Energy Houston Electric	OpCo	FMBs	A2/A/A	\$400	5.150%	3/1/34	+90	-30	4.5x	
2/26/24	DUK	Duke Energy Indiana	OpCo	FMBs	Aa3/A/NR	\$300	5.250%	3/1/34	+100	-30	4.3x	
2/27/24	EIX	Southern California Edison	OpCo	FMBs	A2/A-/A-	\$600	5.350%	3/1/26	+62	-23	2.1x	
2/27/24	EIX	Southern California Edison	OpCo	FMBs	A2/A-/A-	\$600	5.150%	6/1/29	+83	-27	2.2x	
2/27/24	EIX	Southern California Edison	OpCo	FMBs	A2/A-/A-	\$400	5.750%	4/15/54	+135	-28	3.3x	
2/28/24	PEG	Public Service Electric & Gas	OpCo	FMBs	A1/A/NR	\$450	5.200%	3/1/34	+93	-12	2.5x	
2/28/24	PEG	Public Service Electric & Gas	OpCo	FMBs	A1/A/NR	\$550	5.450%	3/1/54	+108	-17	2.6x	
3/4/24	LNT	Wisconsin Power & Light	OpCo	Unsec. Notes	Baa1/A/NR	\$300	5.375%	3/30/34	+118	-27	4.8x	
3/4/24	ETR	Entergy Louisiana	OpCo	FMBs	A2/A/NR	\$500	5.350%	3/15/34	+115	-20	2.6x	
3/4/24	ETR	Entergy Louisiana	OpCo	FMBs	A2/A/NR	\$700	5.700%	3/15/54	+135	-20	2.3x	
3/7/24	AES	Indianapolis Power & Light	OpCo	FMBs	A2/A-/A-	\$650	5.700%	4/1/54	+147	-28	5.4x	

Source: Bloomberg



New utility bond issuance YTD vs. historical

Exhibit 13: Utility bond issuance YTD vs. historical

YTD bond issuance is up ~\$1.1 Bn YoY

Debt Issuance (YTD as of Mar-8)							
Debt Issuance (\$Mn)	2018	2019	2020	2021	2022	2023	2024
OpCo FMBs	16,100	24,690	40,660	32,055	25,875	42,225	18,525
OpCo Unsecured	23,695	18,500	15,555	21,225	20,625	18,800	6,150
HoldCo	22,515	26,818	52,800	36,900	31,205	37,790	12,400
Total Debt Issuance	16,575	14,205	12,600	22,575	20,980	35,940	37,075

Source: Bloomberg

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