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A nighttime cityscape featuring a dense cluster of illuminated skyscrapers and a complex network of multi-level highways with light trails from traffic. The scene is set against a dark blue sky with some clouds.

# Securitization SURFA 51<sup>st</sup> Financial Forum

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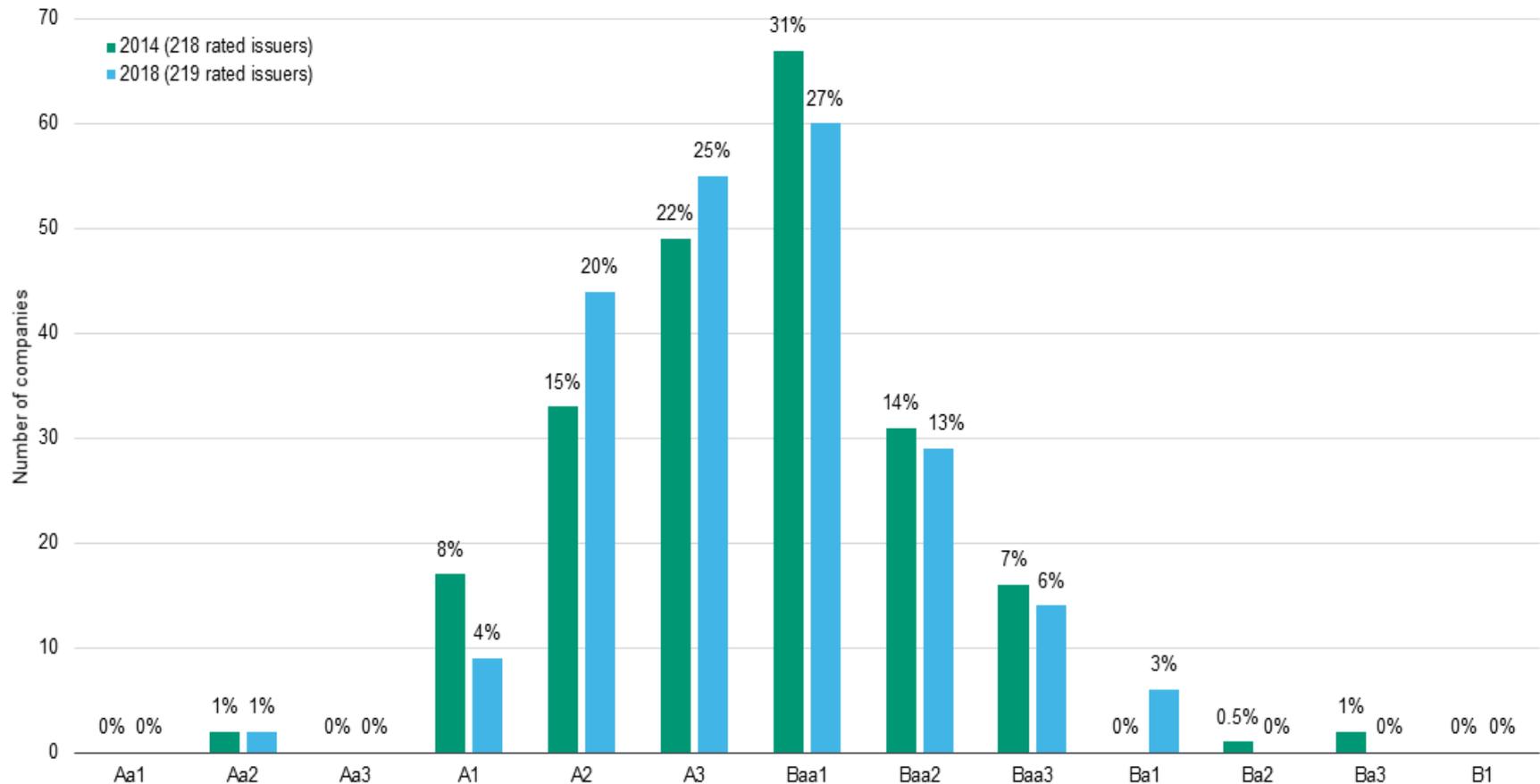


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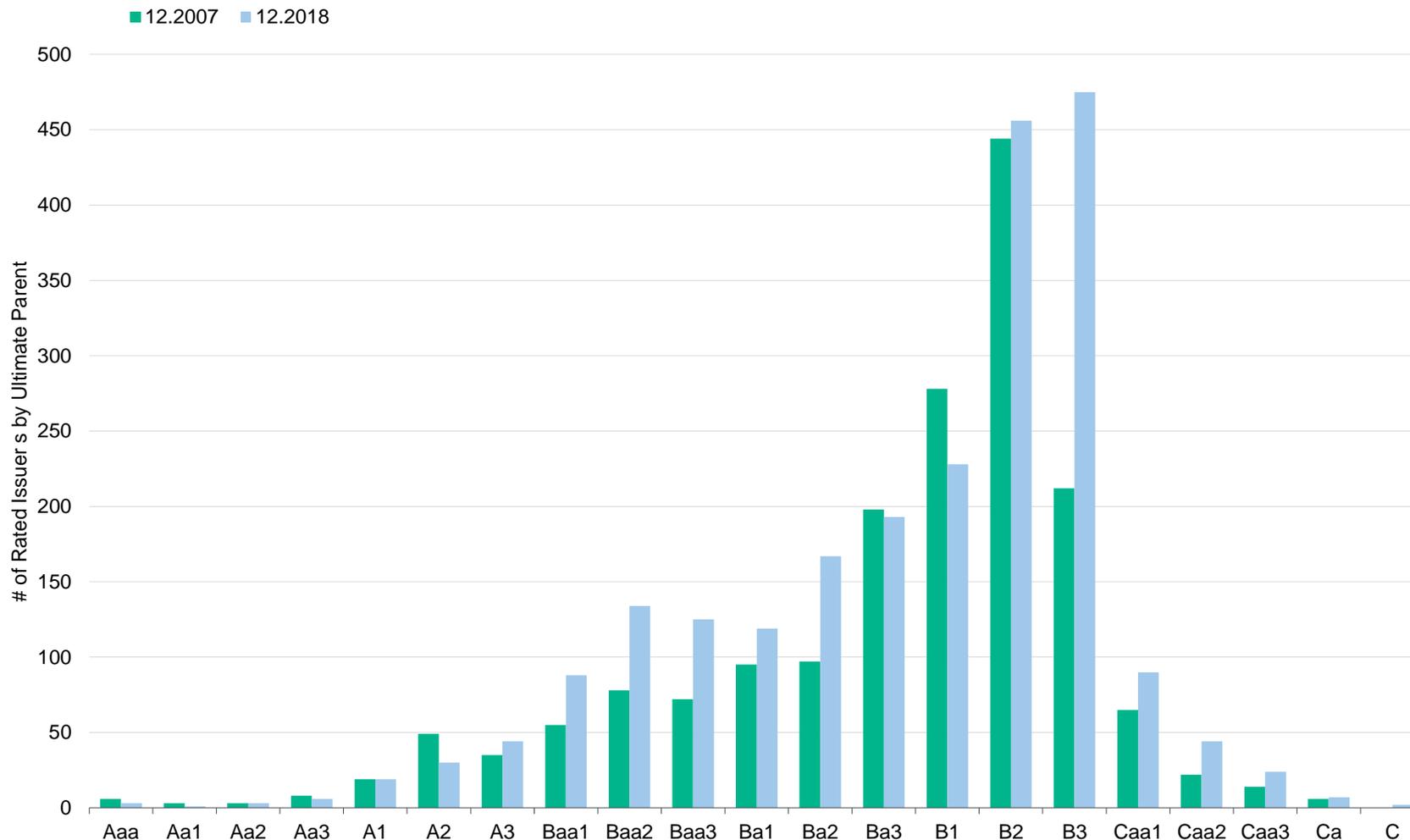
# US regulated utilities portfolio\* ratings distribution remains relatively the same over the last four years



\*The portfolio includes all of the rated parent companies and regulated utility operating companies.  
Source: Moody's Investors Service

# Rating distribution by ultimate parent (CFG Americas)

B3 and lower ratings increasing dramatically over time



# Utility securitization more versatile and widespread

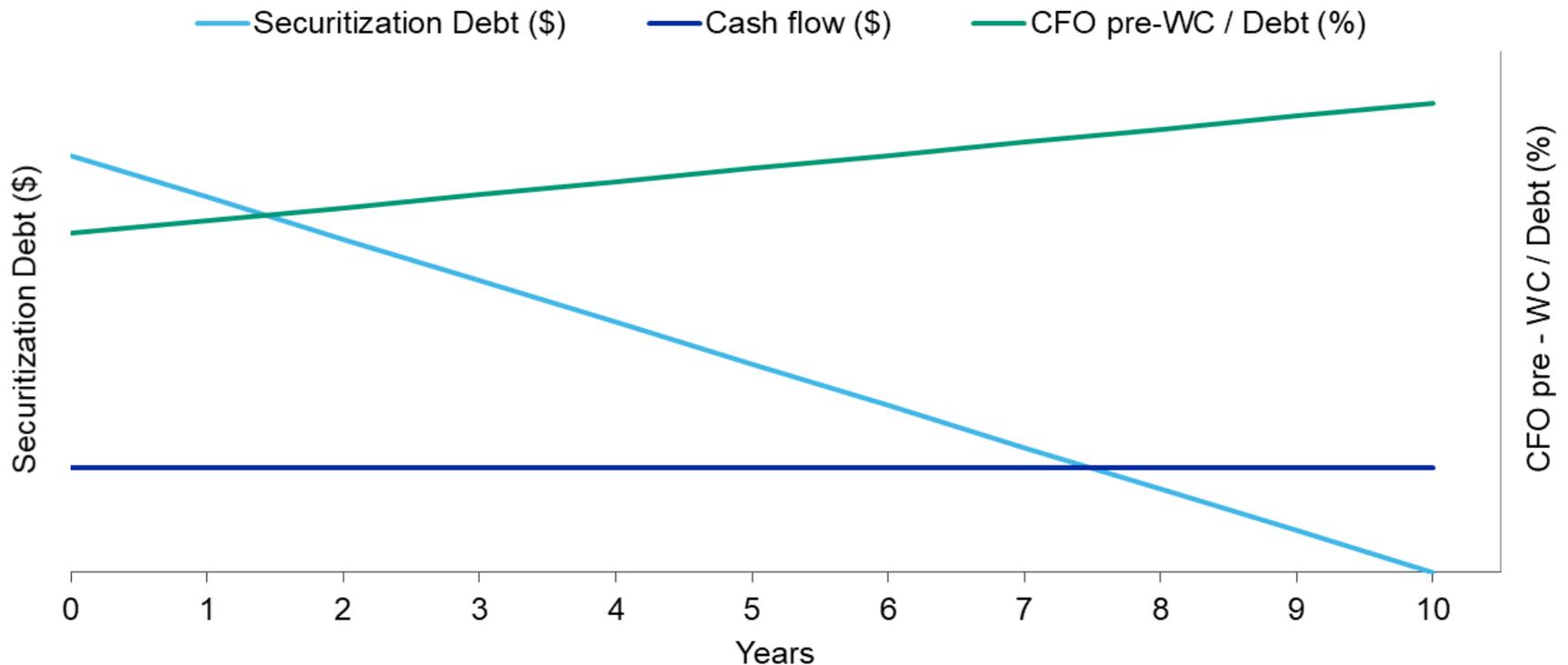
## Moody's rated utility securitizations issued since 2012

Deal Name	Servicer	Issuance (\$ millions)	Year Completed	Rating (sf)	State
PSNH Funding LLC 3, Series 2018-1	Public Service Co. of New Hampshire	\$636	2018	Aaa	New Hampshire
Utility Debt Securitization Authority Restructuring Bonds, Series 2017	Long Island Power Authority	369	2017	Aaa	New York
Utility Debt Securitization Authority Restructuring Bonds, Series	Long Island Power Authority	469	2016	Aaa	New York
Duke Energy Florida Project Finance, LLC	Duke Energy Florida LLC	1294	2016	Aaa	Florida
Utility Debt Securitization Authority Restructuring Bonds, Series	Long Island Power Authority	637	2016	Aaa	New York
Utility Debt Securitization Authority Restructuring Bonds, Series 2015	Long Island Power Authority	1002	2015	Aaa	New York
Entergy New Orleans Storm Recovery Funding I, L.L.C.	Entergy New Orleans LLC	99	2015	Aa1	Louisiana
State of Hawaii Department of Business, Economic Development, and Tourism - Green Energy Market Securitization Bonds, 2014 Ser. A	Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited	150	2014	Aaa	Hawaii
Louisiana Local Government Environmental Facilities and Community Development Authority - System Restoration Bonds (Louisiana Utilities Restoration Corporation Project/EGSL), Ser. 2014 (Federally	Entergy Gulf States Louisiana, L.L.C.	71	2014	Aaa	Louisiana
Louisiana Local Government Environmental Facilities and Community Development Authority - System Restoration Bonds (Louisiana Utilities Restoration Corporation Project/ELL), Ser. 2014 (Federal	EL Investment Company, LLC	244	2014	Aaa	Louisiana
Consumer 2014 Securitization Funding LLC - Senior Secured Securitization Bonds, Series 2014-A	Consumers Energy Company	378	2014	Aaa	Michigan
Utility Debt Securitization Authority Restructuring Bonds Series 2013T and Series 2013TE	Long Island Power Authority	2022	2013	Aaa	New York
Appalachian Consumer Rate Relief Funding LLC - Senior Secured Consumer Rate Relief Bonds	Appalachian Power Company	380	2013	Aaa	West Virginia
Ohio Phase-In-Recovery Funding LLC	Ohio Power Company	267	2013	Aaa	Ohio
FirstEnergy Ohio PIRB Special Purpose Trust 2013	Cleveland Electric Illuminating Company (The), Ohio Edison Company, Toledo Edison Company	445	2013	Aaa	Ohio
AEP Texas Central Transition Funding III LLC, Senior Secured Transition Bonds	AEP Texas Central Company	800	2012	Aaa	Texas
CenterPoint Energy Transition Bond Company IV, LLC, Series 2012 Senior Secured Transition Bonds	CenterPoint Energy Houston Electric, LLC	1695	2012	Aaa	Texas

Source: Moody's Investors Service

# Securitization typically benefits utilities and their current customers

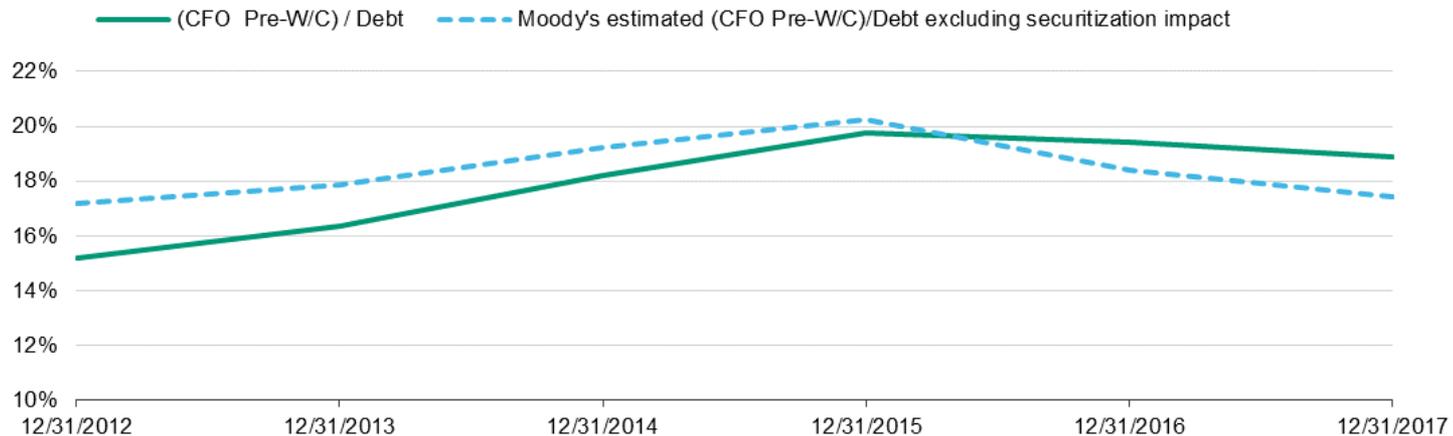
Illustrative example of the impact securitization can have on a utility's ratio of CFO pre-W/C to debt



Source: Moody's Investors Service

# CenterPoint Energy Houston has a long history of issuing securitization bonds

- » In the early 2000s, CenterPoint Energy Houston Electric, LLC (CEHE, A3 stable), sold its generation stations to third parties in accordance with deregulation in Texas.
- » In 2012, after receiving approval from the PUCT, CEHE created a new special purpose subsidiary, CenterPoint Energy Transition Bond Company IV, LLC, which issued \$1.695 billion of securitization bonds in three tranches.
- » The overall time-weighted interest rate of approximately 2.5% for the securitization bonds was substantially lower than the average rate on CEHE's unsecuritized debt of about 7.66% at that time.
- » Moody's estimates that the securitization debt had at most a 200-basis-point impact on CEHE's ratio of CFO pre-W/C to debt either positive or negative, depending on the year.



Source: Company filings, Moody's Investors Service

# Illustrative securitized utility

<i>(\$ billions)</i>	Illustrative Utility	Securitized Utility	Tennessee Valley Authority	Hydro-Quebec
Rating	Baa1		Aaa	Aa2
PE Multiple	n/a	n/a	n/a	n/a
Depreciation (years)	20	20	12	45
% Equity	50%	30%	27%	31%
% Debt	50%	70%	73%	69%
Debt	\$500	\$700	\$28	\$46
Equity	\$500	\$300	\$11	\$21
ROE	9.6%	9.6%	11.9%	15.1%
Interest expense	4.5%	4.0%	4.9%	5.8%
30 year US treasury	3.0%	3.0%	3.0%	3.0%
Spread (basis points)	150	100	187	283
FFO / EBITDA	72%	68%	78%	66%
FFO / debt	20%	11%	16%	12%
Debt / EBITDA	3.7	6.0	5.0	5.4
Capital expenditures	\$100	\$100	\$2	\$3
Dividends	\$26	\$26	\$0	\$2
FFO - Dividends - Capex	-\$28	-\$47	\$2	\$0
FFO - Dividends - Capex / PPE	-3%	-5%	6%	0%
Capex / D&A	2.00	2.00	0.78	1.42
Capex / EBITDA	19%	22%	0%	24%
Dividend Payout	55%	90%	0%	66%

\* Hydro-Quebec amounts are expressed in Canadian Dollars  
Source: Company filings, Moody's Investors Service

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