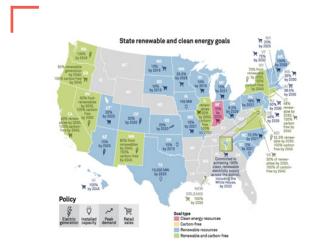
Rate Reduction Bonds-Teaching an Old Dog New Tricks

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Decarbonization addresses three areas – transportation, energy production, and built spaces. In recent years, 36 states have enacted renewable and clean energy goals, with many addressing the associated transition cost through subnational decarbonization legislation. Securing adequate financing is crucial in states' efforts to transition effectively and securitization, previously employed to finance stranded costs, is increasingly being used to fund the transition cost

In the 1990s, when many states deregulated their electricity markets to promote competition and reduce costs, public utility firms found themselves with transition costs associated with decommissioned facilities or phased out operations that were no longer economically viable under the new competitive landscape. Households served by the utilities paid monthly fees until these costs were recovered. Securitization was used to reduce the impact on the utilities' customers (ratepayers) of these stranded costs. Stranded Cost ABS, also known as Rate Reduction Bonds (RRBs), later became a model for utilities to recover extraordinary expenses arising from catastrophic weather events and natural calamities. More recently, it was used extensively to ease the pain of wildfires in California (2017) and of severe winter storms in the south (2021), creating issuance in 2022 that was 22 times greater than the average level of the past 14 years. Now RRBs are being used to recover or reduce expenses associated with the states' transition towards sustainable energy sources and, specifically, to retire coal plants.



Source: Regulatory Research Associates, a group within S&P Global Commodity Insights. © 2022 S&P Global, Joe Felizadio.

21 States Where RRB Securitizations Have Been Issued 1997-2022 (By Purpose)				
Disposing of Stranded Costs	Retiring Nuclear/Coal Plants or Clean Energy Investments	Storm Damage and Wildfire Costs	Deferred Balances*/Other	
California, Montana, Illinois, Pennsylvania, Massachusetts, Michigan, Texas, New Jersey, Louisiana, New Hampshire	Wisconsin, West Virginia, Florida, Michigan, Indiana	Texas, Louisiana, Kansas, Oklahoma, Arkansas, North Carolina, and Florida	New Jersey, Maryland, Ohio, West Virginia	

*Note: Deferred Balances refer to rate stabilization plans that defer the effect of market-rate pricing over a period of years as was the case in <u>Maryland</u>. Source: <u>Saber Partners</u>, LLC, Finsight, SFA Compilation



Where there have been extraordinary losses or costs associated with a catastrophic weather event, the costs are passed through to the consumers. By issuing bonds backed by future revenue streams, securitization allows utilities to raise funds at a lower borrowing rate than traditional financing, and often over longer time periods. Securitization helps the utility maintain financial stability without a break in service, but more importantly absorbs some of the short-term rate shocks that would otherwise be a strain for most retail customers. In our end table, we show 25 securitizations across 6 states that were used to reduce or recover the extraordinary costs associated with catastrophic weather and natural calamities.

The process consists of three key components: state-level legislation authorizing the use of securitization, financing or-ders authorizing utilities to recover costs from ratepayers, and the establishment of specialized entities to facilitate the transaction.

In the initial stage, states empower utilities through legislation to fund cost recovery by issuing bonds. The state utility commission then issues an irrevocable financing order, imposing a surcharge on customers within the utility's service area. The final phase involves the creation of a specialized entity designed to manage the financial aspects of securitiza-tion. The utility channels the cost-specific surcharge payments collected from its customers into this entity, which are then used to pay off the bondholders. This structure is designed to ensure that ratepayers aren't held responsible for securitization costs. The specialized entity manages these transactions, while a separately funded reserve account offers a safeguard against utility defaults.

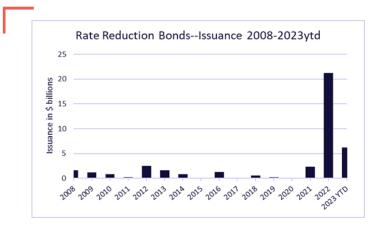
Recent Examples of Stranded Cost or Rate Reduction ABS

In June 2023, Southern Indiana Gas and Electric Co. (SIGECO) issued SIGECO 2023-A, a \$341 million bond offering that was issued pursuant to a financing order issued by the Indiana Utility Regulatory Commission under the Indiana Utility Act 386 (Securitization Act). The <u>bonds</u> are secured by the issuer's irrevocable right to bill and collect from SIGECO's retail customers a surcharge on their energy bills over a specified period. Proceeds from the bond offering will be used to reimburse SIGECO for costs incurred from retiring two coal-powered plants, said to be part of their long-term electric generation transition plan.

In March, Texas Public Finance Authority (TPFA) raised \$3.5 billion through the Texas Natural Gas Securitization Finance Corporation. The purpose of the offering was to recover costs incurred by TPFA in 2021 following a "large imbalance in the supply and demand of natural gas between utility companies and consumers." The imbalance followed an extended period of cold weather culminating in Winter Storm Uri, which resulted in a significant reduction in natural gas availability, forcing TPFA to source natural gas through local distribution companies at a much higher rate. The bonds were issued pursuant to a financing order by the Railroad Commission of Texas in accordance with House Bill 1520.

According to Finsight, \$6.2 billion of issuance came to market in the first half of 2023. This follows a record-setting \$21.2 billion of new issuance in 2022 which accounts for 52% of total issuance since 2008. With the overwhelming ma-jority of the RRBs bonds carrying the highest credit rating of triple-A and offering generous spreads relative to similarly rated fixed income investments, investor interest in RRBs has been strong.

S&P has rated 190 triple-A tranches totaling approximately \$26 billion. According to S&P, RRBs provide an "increasingly important source of capital for climate solutions as it relates to physical risk,



energy transition, and increased demand for electricity." Further, the rating agency continues, "physical risk-related funding needs can include reimbursements of fuel prices, storm and wildfire recovery costs, and grid improvement and restoration. Examples of energy transition-related financing include carbon



plant decommissioning, investments in renewable energy and energy storage projects, and potential costs due to regu-latory compliance. Increased demand for electricity continues to prompt further investments in diverse pools of power generation sources, and the management of grid infrastructure, expansion, and resilience." S&P, in their report Non-Traditional ABS Issuance-and-2023-Outlook, notes that the asset class is "positioned for growth, given the increased frequency of extreme weather events and the need for risk mitigation projects."

Rate Reduction ABS by Purpose (2018-2023)				
Issuance	Issuer	State		
WEPCO 2021-1 (USD 119m)	WEC Energy Group Inc	WI	Costs: Retiring Coal Plants	
SIGECO 2023-A (USD 341m)	CenterPoint Energy Inc	IN	Costs: Retiring Coal Plants	
DTE 2022-A (USD 236m)	DTE Energy Co	МІ	Costs: Retiring Coal Plants	
Pendingscheduled for 2023	Michigan Consumer Energy \$688 approved December 2020	MI	Costs: Retiring Coal Plants	
PendingApproved June 22	Michigan Consumer Energy \$601.6m approved June 22, 2023	МІ	Costs: Retiring Coal Plants	
Pendingstill in litigation	New Mexico PNM \$360m approved in April 2020	NM	Costs: Retiring Coal Plants	
ATO 2023-A (USD 95m)	Atmos Energy Corp	KS	Costs: Winter Storm Uri 2021	
TNGSFC 2023 (USD 3,522m)	Texas Public Finance Authority	TX	Costs: Winter Storm Uri 2021	
BRELPO 2022 (USD 713m)	Brazos Electric Power Cooperative Inc	TX	Costs: Winter Storm Uri 2021	
COSERV 2022 (USD 460m)	Denton County Electric Cooperative Inc (dba CoServ Electric)	TX	Costs: Winter Storm Uri 2021	
<u>UNIELC 2022 (USD 452m)</u>	United Electric Cooperative Inc (UEC)	TX	Costs: Winter Storm Uri 2021	
ERCOTT 2022-1 (USD 2,116m)	Electric Reliability Council of Texas Inc (ERCOT	TX	Costs: Winter Storm Uri 2021	
RAYCSC 2022 (USD 908m)	Rayburn Electric Cooperative	TX	Costs: Winter Storm Uri 2021	
LCDA 2022-ENO (USD 209m)	Entergy Corp	TX	Cost: Winter Storm Uri 2021 Plus Hurricanes	
ETR 2022-A (USD 291m)	Entergy Corp	TX	Cost: Winter Storm Uri 2021 Plus Hurricanes	
OGS 2022-A (USD 336m)	One Gas Inc	ОК	Costs: Winter Storm Uri 2021	
ODFA 2022-PSO (USD 697m)	American Electric Power Co Inc (AEP)	ОК	Costs: Winter Storm Uri 2021	
ODFA 2022-ONG (USD 1,354m)	One Gas Inc	ОК	Costs: Winter Storm Uri 2021	
ODFA 2022 (USD 762m)	OGE Energy Corp	ОК	Costs: Winter Storm Uri 2021	
LCDA 2022-ENO (USD 209m)	Entergy Corp	LA	Cost: Winter Storm Uri 2021 Plus Hurricanes	
LCDA 2022-ENO (USD 209m)	Entergy Corp	LA	Cost: Winter Storm Uri 2021 Plus Hurricanes	
CNL 2022-A (USD 425m)	Cleco Partners LP	LA	Cost: Winter Storm Uri 2021 Plus Hurricanes	
DUK 2021-A (USD 237m)	Duke Energy Corp	NC	Cost: <u>Hurricanes</u>	
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SCERF 2021-A (USD 338m)	Edison International	CA	Costs: Wildfires 2017	
PCG 2021-A (USD 860m)	PG&E Corp	CA	Costs: Wildfires 2017	
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PCG 2021-A (USD 860m)	PG&E Corp	CA	Costs: Wildfires 2017	
SCERF 2021-A (USD 338m)	Edison International	CA	Costs: Wildfires 2017	
PCG 2021-A (USD 860m)	PG&E Corp	CA	Costs: Wildfires 2017	
SCERF 2021-A (USD 338m)	Edison International	CA	Costs: Wildfires 2017	
AEPTC 2019-1 (USD 235m)	American Electric Power Co Inc (AEP)	TX	Cost: <u>Transition</u> /Deregulation	

Source: Finsight and SFA Market Compilation