Securitization of Coal Plant Retirements: Implications for Just Energy Transitions

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Abstract

Climate change and its destabilizing effects are already here. Yet there is a chance to prevent even worse scenarios if carbon emissions can be quickly and drastically reduced, especially in the carbon-intensive energy sector. While the need to transition to low-carbon, renewable sources of energy is urgent, many legal, political, and economic barriers stand in the way of an efficacious and equitable shift away from fossil fuels to cleaner energy sources.

One such barrier involves the massive investments that have already been made in now-obsolete energy infrastructure. Ratepayers are still paying for initial construction and improvements to coal-fired power plants that produce one-fifth of the nation’s electricity. To retire those plants for new, clean energy infrastructure would risk saddling ratepayers with the costs of new infrastructure while they continue to pay off debt associated with plants that are no longer operational. Quick shifts from old to new energy infrastructure also pose a risk of severe economic displacement to coal-reliant workers and communities.

This Essay assesses a financial tool that states have begun to use to incorporate equity for ratepayers into transitions away from coal-fired power plants: securitization. Securitizing rate payments allows utilities to re-finance their debt at a lower cost. This means that even though ratepayers do pay new costs for clean energy infrastructure, these costs are lower, and the ratepayers are relieved from paying for all or part of the remaining value.

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of the coal-fired power plants. Some securitization laws also offset losses for coal-reliant workers and communities, embracing a “three-part approach” to securitization: shift to clean energy, refinance infrastructure debt, and provide transitional financial assistance. The Essay surveys recent state action enabling securitization and evaluates the efficacy of certain features of those statutes. It argues that securitization could be an important piece of the puzzle in both reducing opposition to the coal phaseout and facilitating an equitable distribution of costs and benefits in the process. However, variations in the specifics of these statutes can impact the extent of the benefits to the environment, ratepayers, workers, and communities.

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INTRODUCTION

As increasing extreme weather events have illustrated, climate change has arrived and its effects are being felt sooner and more acutely
than many imagined. Yet, there is still a chance to prevent even worse scenarios if greenhouse gas emissions can be quickly and drastically reduced. As one of the greatest contributors to carbon dioxide and other greenhouse gas emissions, the energy sector is in the spotlight of climate change mitigation efforts. While the need to transition to low-carbon, renewable sources of energy is urgent, many legal, political, and economic barriers stand in the way of efficacious, affordable, and equitable shifts away from fossil fuels to cleaner energy sources.

One such barrier involves the massive public and private financial investments that have already been made in now-obsolete energy infrastructure, otherwise known as “stranded assets.” In particular, electricity customers—also known as “ratepayers”—are still paying for the initial construction and periodic improvements to the coal-fired power plants that still produce one-fifth of the nation’s electricity. In fact, as of this writing, ratepayers are still paying off ninety-three percent of coal capacity through

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1 Heather Payne, Pulling in Both Directions: How States Are Moving Toward Decarbonization While Continuing to Support Fossil Fuels, 45 COLUM. J. ENV’T L. 285, 286 (2020); Rich Glick & Matthew Christiansen, FERC and Climate Change, 40 ENERGY L.J. 1, 45 (2019); Climate change widespread, rapid, and intensifying, IPCC (Aug. 9, 2021), https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/.

2 Payne, supra note 1, at 287 (citing IPCC report warning of “outright chaos” if swift action to prevent global warming is not taken); Blake Hudson, Dynamic Forest Federalism, 71 WASH. & LEE L. REV. 1643, 1673–74 (2014).


5 Roberts, supra note 4, at 3.

long-term contracts or cost-of-service rates in which customers’ bills incorporate utilities’ past capital investments alongside the costs of service provision and a “reasonable rate of return” for the utility.\(^7\)

Thus, to retire those plants in favor of clean energy infrastructure risks the inequity of saddling ratepayers with the costs of the new infrastructure while they continue to pay off the debt associated with plants that are no longer operational. An additional potential consequence of expediting the coal phaseout includes creating novel, destabilizing economic costs to coal-reliant workers and communities.\(^8\) For localities and regions that have hosted coal-fired power plants, a poorly planned plant shutdown alongside ambitious new clean energy investments risks leaving the local population with fewer jobs, higher energy bills, and related collateral consequences.\(^9\) These real risks to ratepayers and workers contribute to what scholars call “carbon lock-in,” or path dependencies that inhibit clean energy transitions.\(^10\)

This Essay assesses a financial tool that states have begun to use to facilitate transitions away from coal-fired power plants: securitization.\(^11\) Securitizing rate payments allows utilities to refinance their debt at a lower cost and use the new financing to both pay off the coal-fired power plant and pay for a new, clean energy source.\(^12\) This means that even though ratepayers do pay new costs for clean energy infrastructure, these costs are lower, and the ratepayers are relieved from paying for all or part of the remaining value of the coal-fired power plants.\(^13\)

Some states’ securitization laws also make provisions for transitional assistance to coal-reliant workers and communities, most notably in New...
Mexico and Colorado. Specifically, New Mexico’s statute created the “energy transition displaced worker assistance fund” and mandated development of a plan to assist displaced workers, public meetings in affected communities to inform the use of money in the fund, consultation with stakeholders in the affected area, and direct payments to tribes, pueblos, and local governments for community economic development initiatives. Colorado’s statute similarly directs that funds derived from securitization should be used to assist workers and communities affected by the coal phaseout.

Such measures might not automatically seem to go hand in hand with securitization’s debt refinancing structure, and indeed, New Mexico’s and Colorado’s statutes currently go further than other states’ laws in providing transitional worker and economic development assistance. However, an approach that accounts for the potential economic displacement from the coal phaseout seems potentially poised to be more equitable and effective than narrower strategies. A report prepared by prominent environmental nongovernmental organizations (“NGOs”), advocates transition financing in a “three-part approach” to accelerate the coal phaseout: “(1) refinancing to fund the coal transition and save customers money on day one; (2) reinvesting in clean energy; and (3) providing transition financing for workers and communities.”

The discussion that follows surveys recent state action adopting securitization and evaluates the efficacy of certain features of those statutes. It argues that securitization could be an important piece of the puzzle in both reducing opposition to the coal phaseout and facilitating equitable distributions of costs and benefits in the process. The three-part approach adopted by states such as Colorado and New Mexico holds promise for promoting energy justice for ratepayers and just transitions for coal-reliant

14 See, e.g., COLO. REV. STAT. § 40-41-107(1)(a) (2019) (“The commission may attach such conditions to the approval of a financing order as the commission deems appropriate to maximize the risks of the transaction to customers, directly impacted Colorado workers and communities, and the electric utility.”).


16 COLO. REV. STAT. ANN. § 40-41-102 (2019); see also MO. ANN. STAT. § 393.1705 (2021) (“changes in electrical corporation’s revenue requirement that shall be deferred shall only consist of certain changes, including changes in labor and benefit costs for employees or contractors no longer employed or retained by the electrical corporation who formerly worked at the retired or abandoned unit, net of severance and relocation costs of the electrical corporation paid to such employees or contractors”).

17 Paul Bodnar et al., RMI, HOW TO RETIRE EARLY: MAKING ACCELERATED COAL PHASEOUT FEASIBLE AND JUST 8 (2020), https://rmi.org/insight/how-to-retire-early; cf. Hammond & Rossi, supra note 10, at 650 (arguing that regulators providing for stranded cost recovery should be attentive to social values not currently priced in energy markets).
communities. However, variations in the specifics of these statutes can impact the extent of the benefits to the environment, ratepayers, workers, and communities. Measures providing for public participation in financing orders, requiring funds be used for specific public needs including transitional assistance, allowing for accelerated depreciation of coal plants, and ensuring that coal plants will be fully paid off are key steps to ensure that securitization is democratically accountable and substantively equitable.

The Essay proceeds as follows. Part I.A briefly provides background on the urgency of phasing out coal-fired power plants. Part I.B then explains key barriers to coal plant retirements, including the existing debt associated with the coal plants and the risks plant retirements pose to workers and communities. Part II.A outlines the common components of the securitization process enabled by recent statutes, while Part II.B illustrates how these approaches stand to help overcome financial and economic barriers to coal plant retirements. Part III then assesses several recently passed state securitization statutes to propose a set of best practices for securitization statutes in order to ensure fairness for ratepayers and workers.

I. CLIMATE CHANGE AND BARRIERS TO COAL-FIRED POWER PLANT RETIREMENTS

A. The Need to Retire Coal-Fired Power Plants

The climate crisis and the need to reduce greenhouse gas emissions quickly and dramatically have been discussed at length elsewhere. As such, we provide only a brief summary of those conditions here. In short, scientists overwhelmingly agree that global greenhouse gas emissions must be reduced to net zero by the year 2050.\(^{18}\) Failing to achieve this dramatic emissions reduction means that the Earth’s temperature could warm by as much as 3 degrees Celsius by the year 2050.\(^{19}\) Already, the global temperature has warmed to 1 degree Celsius above preindustrial


levels.\textsuperscript{20} With existing planetary warming, extreme weather events have already begun to affect human welfare through extreme heat and cold, more frequent and severe storms, flooding, and population displacement. Without swift and dramatic action, worst-case climate scenarios include “a world of ‘outright chaos’ on a path to the end of human civilization and modern society as we have known it . . . [where] political panic becomes the norm.”\textsuperscript{21}

Certain sectors contribute to the greenhouse gas emissions driving climate change substantially more than others. The transportation sector is the largest contributor to greenhouse gas emissions in the United States, accounting for twenty-nine percent of emissions.\textsuperscript{22} The electricity sector—a major component of the broader energy sector\textsuperscript{23}—comes in at a close second, contributing to twenty-five percent of greenhouse gas emissions in the United States.\textsuperscript{24} Carbon dioxide is the most prominent among these greenhouse gases, accounting for roughly eighty percent of anthropogenic emissions in 2019.\textsuperscript{25} The electricity sector’s contributions to greenhouse gas emissions result in large part from its ongoing use of carbon-intensive fossil fuels, including coal. Coal accounts for roughly nineteen to twenty-four percent of U.S. electricity generation but makes up sixty-one percent of the sector’s carbon emissions.\textsuperscript{26}

The importance of phasing coal out of energy production stems both from coal’s high carbon emissions and from its increasing expense com-

\textsuperscript{20} Payne, supra note 1, at 286.

\textsuperscript{21} Id. at 287 (quoting DAVID SPRATT \& IAN DUNLOP, EXISTENTIAL CLIMATE-RELATED SECURITY RISK: A SCENARIO APPROACH 10 (2019), https://docs.wix-static.com/ugd/148cb0_90dc2a2637f348edae45943a88da04d4.pdf [https://perma.cc/U9CF-63RM]).

\textsuperscript{22} Sources of Greenhouse Emissions, supra note 3.

\textsuperscript{23} The U.S. energy sector as a whole includes markets in primary energy sources such as fossil fuels and renewables that are used for a variety of activities. Electricity is a secondary energy source produced from these primary sources. See U.S. Energy Facts Explained, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/energyexplained/us-energy-facts/ (last updated May 14, 2021); “Clean energy” or “decarbonized energy” is often used as a shorthand or synonym for clean electrification; cf. Shelley Welton, Clean Electrification, 88 COLO. L. REV. 571 (2017).

\textsuperscript{24} Sources of Greenhouse Emissions, supra note 3; Roberts, supra note 4, at 4.


pared to other energy sources. Recent trends in coal plant and mine closures are often attributed to the shrinking costs of solar, wind, and natural gas.\(^{27}\) Intentional policy shifts toward renewable energy are also catalyzing the transition to clean energy by changing investment incentives and regulatory mandates. Therefore, whether mine and plant retirements are planned or not, the country needs to prepare for life after coal while still addressing coal’s far-reaching legacy.\(^{28}\)

\textbf{B. Financial Obstacles to Retiring Coal-Fired Power Plants}

Key aspects of the historic and modern electricity regulation landscape help illustrate the complexity of coal plant financing, and in turn, the significance and potential of coal plant securitization. Electricity regulation has been called “the most complex machine ever built”\(^{29}\) that “defies easy generalization,”\(^{30}\) and as such, a full description of how electricity regulation works is outside the scope of this Essay. That said, understanding securitization requires a basic background on “cost-of-service” utility regulation.

The traditional model of electricity regulation born in the late nineteenth and early twentieth centuries emphasized cost-of-service regulation. During that “public utility era,” “most Americans purchased electricity from rate-regulated, vertically integrated utilities,” meaning that utilities owned all levels of energy production and distribution.\(^{31}\) Utilities, which operated as businesses, entered into a “regulatory compact” with regulators: the utilities, understood to be “natural monopolies” that should be protected from competition, were given exclusive service territories in exchange for their agreement to provide electricity to the public at just and reasonable rates.\(^{32}\)

Under this traditional rate regulation model, regulators allowed electric utilities to charge customers rates that included: (1) the cost of providing the energy; (2) the cost of capital investments, including investments


\(^{28}\) Fong & Mardell, supra note 6; see also O’Boyle, supra note 27.

\(^{29}\) Boyd & Carlson, supra note 19, at 812.


\(^{31}\) Macey, supra note 4, at 1080.

\(^{32}\) Id. at 1080 n.9, 1089.
in power plants; and (3) a specified rate of return for the utility company.\(^{33}\) This model of rate regulation sought, at least nominally, to strike a balance between allowing utilities reasonable returns on their investments (and incentivizing utilities to make those investments in the first place) while protecting consumers from abuses of market power for a service infused with public importance.\(^{34}\)

Starting in the 1970s and accelerating in the 1990s, as part of the broader movement to deregulate traditionally regulated industries, measures at the state and federal level aimed to remove barriers to entry into electricity markets and enable competition in various phases of the process of energy production and distribution, pushing back against the natural monopoly/regulated utility model.\(^{35}\) However, “the push to create competitive electricity markets never took complete hold across the country.”\(^{36}\) This means that over the past several decades, states “have enjoyed considerable leeway” in opting for deregulated electricity markets, traditional utility regulation, or a hybrid version of the two.\(^{37}\)

Thus, today there are “three basic models of electricity regulation emerging across the country: a fully restructured model that combines competition at wholesale and retail levels; a traditional model that continues to employ the basic cost-of-service approach to regulating vertically integrated Investor-Owned Utilities (IOUs); and a hybrid model that combines competitive wholesale markets with regulated retail service.”\(^{38}\) The first model is seen in Texas and the Northeast, the second in the Southeast and most of the West, and the third in the rest of the country.\(^{39}\) Yet, even in states that have pursued the first model, scholars agree that full deregulation remains elusive, and as such, utilities and the vestiges of rate regulation remain important factors in most states’ electricity regulation schemes.\(^{40}\)

Within the context of this complex regulatory morass, climate change has upended decades-old expectations among investors, utilities, and regulators as to the length of coal-fired electricity plants’ depreciable lives, creating a mismatch between existing path dependencies and current and


\(^{34}\) Macey, supra note 4, at 1081.

\(^{35}\) Id.

\(^{36}\) Boyd & Carlson, supra note 19, at 813.

\(^{37}\) Id. at 813–14.

\(^{38}\) Id.

\(^{39}\) Boyd, supra note 30, at 1631.

\(^{40}\) Macey, supra note 4, at 1081–82; Boyd & Carlson, supra note 19, at 814.
future needs. The utility companies that built most of the country’s power plants are in a unique business position because of their relationship with government regulators.41 Much like an ordinary business, utilities raise money from debt and equity investors to fund their capital projects, including building power plants.42 Unlike ordinary companies, utilities operating in most states must get approval from governmental regulators to make capital expenditures, and those regulators also have a say in how much the utilities can charge ratepayers for use of the utility.43

In most states, rate regulation is still a relevant process for setting electricity rates and paying for utilities’ investments in power plants. As mentioned above, customers are charged for a combination of: (1) the cost of providing the energy; (2) the cost of capital investment in the power plant; and (3) the rate of return. Typically, the rate of return is paid to the utility company’s investors in the form of interest on bonds or dividends to shareholders.44 The second and third parts of the customer rate—the cost of the capital investment in the power plant and the rate of return—are paid slowly over the depreciable life of the plant. The depreciable life of the power plant is an estimate, made at the time of the plant’s initial development, of how long the plant will be able to operate as a power plant.45

Thus, when the plant is first built, the utility raises money to pay for the plant from investors. The plan at that point is to make that money back over the expected life of the plant via payments from ratepayers. When accounting for the repayment of the plant financing, the expected life of the plant is referred to as its “depreciable life” because it is the period over which the value of the plant depreciates to zero. So long as ratepayers are


44 FISHER, POSNER & VARADARAJAN, supra note 43, at 3.

using the energy produced by these plants, having ratepayers pay for the cost of the plant seems unproblematic. However, as discussed above, climate change has reduced estimates for how long coal plants will be in use. Relatively new environmental and economic considerations indicate that currently operating coal-fired power plants ought to be shut down now, rather than when they cease to be operational. But shutting down the plant before it reaches the end of its depreciable life means the utility is still owed payment for the rest of the value of the coal plant after it has stopped producing electricity.

Because ratepayers are typically the ones who pay for the coal plant, early retirement of a plant could leave current ratepayers continuing to pay for a plant that no longer produces energy—a stranded asset. The utility must then make a new capital investment in a cleaner source of energy—an investment that ratepayers will ultimately pay for over the depreciable life of the new plant. Referring to the three elements of charges to customers discussed above, this would mean that component (2) becomes much larger. In this situation, ratepayers’ electricity bills would account for the cost of the capital investment in the now-retired coal plant and the new, clean energy source. Therefore, despite the very good reasons to retire coal plants early, doing so risks sharply increasing the cost of energy for ratepayers. Moreover, if the utility must take on additional debt to pay for a new plant and other transition costs, each new round of debt will likely be more expensive than the last. And taking on a lot of debt could put the utility in a precarious financial position.

In addition to the negative impacts on ratepayers, early retirement would mean the loss of jobs for employees of the existing coal plant. Although the number of such employees may rise only into the dozens for some plants, the loss of a plant can substantially destabilize the local and regional economies. A coal-reliant community that loses a plant loses jobs, local and state tax revenue, and local economic activity supporting local businesses and services. Economists warn of a risk of fiscal collapse in the twenty-six U.S. counties that are formally classified as coal-dependent. Post-coal destabilization also has implications beyond coal communities’

47 Cf. Roberts, supra note 4, at 3.
48 Fong & Mardell, supra note 6.
49 Because the more debt a company has, the riskier it is as a borrower and therefore the higher interest rate it will have to pay to borrow.
50 Fong & Mardell, supra note 6.
51 MORRIS, KAUFMAN & DOSHI, supra note 9, at 6.
borders, such as struggling counties being unable to pay debts on U.S. municipal bonds.\textsuperscript{52} These economic dependencies contribute to the stickiness of coal infrastructure and drive opposition to renewable energy transitions.

In sum, even though low-carbon energy today is often cheaper than coal-powered energy, substantial financial obstacles still exist that discourage a transition away from coal-fired power plants. Securitizing the flow of payments from ratepayers is one promising path to resolve this quandary.

\section*{II. A Possible Solution: Rate Payment Securitization}

\subsection*{A. Components of Rate Payment Securitization}

Securitization refers to the conversion of an asset that is not a tradable financial product into a tradable financial product, or security.\textsuperscript{53} In the case of early-retiring coal plants, the asset that is securitized is the flow of payments from ratepaying customers and the security that investors purchase is a bond backed by that flow of payments.

A common way for businesses to raise capital is by issuing bonds to investors. Investors purchase the bonds, the company takes and can use the investors’ money, and the bonds entitle the investors to be repaid with interest according to a particular schedule over time. The key distinction for the securitized bonds is that the terms of the bond say that rate payments by energy customers will be used to repay the investors in accordance with the prescribed schedule. Guaranteeing that some portion of rate payments go directly to repay the bonds reduces the risk of investing in the bonds, and therefore reduces the interest owed on the bonds. Securitization makes the new debt less expensive. Thus, the flow of payments from ratepaying energy customers has been securitized into a bond that can be sold to investors. The utility can then use the money that investors pay for the securitized bond to pay off the remaining depreciable value of the coal plant, to finance a new source of renewable energy, and, ideally, to pay for services to transition coal plant workers into new jobs in renewable energy.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{52} Id.
\item \textsuperscript{53} The legal definition of a security in the U.S. is much more complex. See 15 U.S.C. § 77b; SEC v. Howey Co., 328 U.S. 293 (1946).
\end{itemize}
\end{footnotesize}
State public utility commissions are the main body regulating electricity sales, and as creatures of state government, these commissions need permission from the state to conduct their activities.\(^4\) Thus, implementing legislation at the state level is necessary to facilitate rate payment securitization to retire coal-fired power plants.\(^5\) Specifically, such legislation empowers regulators to take the steps necessary to facilitate the issuance of rate payment-backed bonds. To that end, the legislation should empower the utility regulator to: (1) assess the value of the coal plant to determine the amount of the bond;\(^6\) (2) set and adjust energy rates to ensure repayment of the bonds; (3) create the special purpose entity that will issue the bonds and repay them from customer rate payments; (4) ensure the special purpose entity is the owner of the ratepayer charges used to repay the bonds; and (5) agree not to change this arrangement until the bonds have been repaid.\(^7\)

Several states have enabled rate payment securitization to retire coal-fired power plants. Colorado,\(^8\) Montana,\(^9\) and New Mexico\(^10\) passed securitization statutes in 2019. Kansas,\(^11\) North Carolina,\(^12\) and Missouri\(^13\) followed suit in 2021. In Wisconsin, an existing statute allowing for securitization of costs associated with pollution control equipment was used to...
facilitate retirement of the Pleasant Prairie coal plant in 2018. Michigan already had a statute enabling securitization, passed in 2000, which was used in a 2020 multi-stakeholder process to plan the retirement of the Karn coal plant. Other states, such as Minnesota, have considered bills to enable securitization but have not yet passed them as laws.

While the process varies some from state to state, the public-private nature of utilities means that several stakeholder groups must coordinate to successfully complete a securitized transition. To walk through an example, the Colorado Energy Impact Bond Act went into effect on May 30, 2019. With the passage of this legislation, approved Colorado utilities may issue Colorado Energy Impact Bonds, or “CO-EI bonds,” after application to the Colorado Public Utilities Commission. These bonds are defined as “low-cost corporate securities” that must mature within thirty-two years following issuance, they are rated “AA” or “AA2” or better by at least one major independent credit rating agency at the time of pricing, and that are issued by an electric utility or an assignee pursuant to a financing order, the proceeds of which are used, directly or indirectly, to recover, refinance, or refinance commission-approved CO-EI costs and financing costs.”

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68 Id. § 40-41-103. The CO-EI bonds are meant to be “low-cost corporate securities, such as senior secured bonds . . . or other evidences of indebtedness or ownership that have a scheduled maturity date as determined reasonable by the [Colorado public utilities] commission but not later than thirty-two years following issuance, they are rated “AA” or “AA2” or better by at least one major independent credit rating agency at the time of pricing, and that are issued by an electric utility or an assignee pursuant to a financing order, the proceeds of which are used, directly or indirectly, to recover, refinance, or refinance commission-approved CO-EI costs and financing costs.” Id. § 40-41-102(5).
years and “the proceeds of which are used, directly or indirectly, to recover, finance, or refinance” approved costs.69 “Banks, trust companies, savings and loan associations, insurance companies, executors, administrators, guardians, trustees, and other fiduciaries may legally invest any money within their control in CO-EI bonds.”70 Public entities may also invest in CO-EI bonds under certain conditions.71 To pay back the bondholders, the utilities may then collect charges as revenue in customer bills in order to cover costs “associated with, or [that] remain as a result of the retirement of an electric generating facility located in the state.”72 Revenue can also be used for “[a]mounts for assistance to affected workers and communities if approved by the commission” and costs associated with previously closed plants.73 The financing order allowing bonds to be issued then remains in effect until all CO-EI bonds have been paid in full.74

Comparing Colorado with North Carolina illustrates the varied nature of states’ approaches to securitization. In contrast to Colorado law’s detailed guidance, North Carolina’s statute only briefly directs the North Carolina Utilities Commission (“Commission”) to “establish rules for securitization of costs associated with early retirement of subcritical coal-fired electric generation facilities.”75 The law directs the Commission to “develop rules to determine costs to be securitized at fifty percent of the remaining net book value of all subcritical coal-fired electric generating facilities . . . with any remaining non-securitized costs to be recovered through rates.”76 The next section turns to the potential of these laws to help overcome obstacles to coal plant retirements.

B. How Rate Payment Securitization Can Overcome Obstacles to Retiring Coal-Fired Power Plants

Securitization of costs associated with energy infrastructure is not new. The practice gained popularity during the 1990s and early 2000s to

69 Id. § 40-41-102(5).
70 Id. § 40-41-111.
71 Id.
72 Id. § 40-41-102(7).
73 Id. § 40-41-102-7(a)(I)–(II).
74 Id. § 40-41-105.
address a proliferation of stranded assets and unanticipated expenses associated with the deregulation of state energy markets.\textsuperscript{77} However, it has only recently begun to be used to support the coal phaseout specifically.\textsuperscript{78} Observers have noted that securitizing electricity payments to refinance coal plants “is a financing tool that creates the possibility for a rare win-win-win: as a coal plant retires, consumers pay lower electricity rates, utilities invest in and benefit from clean energy replacement, and workers and communities receive funding to support local economic development.”\textsuperscript{79}

Most of these wins from securitizing rate payments come from the fact that securitization allows a utility to pay a lower interest rate on the securitized debt than it would be able to obtain without securitization.\textsuperscript{80} Investors demand higher interest rates when they believe there is more risk involved in an investment. The more debt a company takes on, the riskier the company tends to appear to investors. The more debt a company must repay, the more likely it may appear that the company could fail to repay its bonds.

As discussed above, if a utility company retires its coal plant before the end of its depreciable life, it will still be repaying the debt for the coal plant even while the plant is not in use. If the utility then needs more money to build a sustainable energy facility, it will most likely need to take on additional debt. The additional debt will most likely require the utility to pay a higher interest rate. If the utility were to borrow additional funds to cover the cost of transitioning workers to the new facility, that would only add to its debt load and interest payments.

Securitizing rate payments from customers can drastically reduce the interest rate on debt that is taken to fund new energy sources. Rate payment securitization results in a lower interest rate for three related reasons: (1) the debt is often not directly issued by the utility; (2) the debt is backed by the flow of rate payments by energy customers; and (3) a government regulator guarantees that the flow of rate payments will be sufficient to repay the bonds.

\textsuperscript{77} Hammond & Rossi, supra note 10, at 647, 652–58 (reviewing how energy regulators have provided for significant stranded cost compensation in the past); Seth Gil- len, Great Expectations: Stranded Cost Recovery and the Interplay of the Electricity Industry, Consumers, and the Public Utility Commission of Texas, 7 TEX. TECH ADMIN. L.J. 345, 347 (2006).

\textsuperscript{78} Fong & Mardell, supra note 6; Payne, supra note 46, at 733–34.

\textsuperscript{79} Fong & Mardell, supra note 6.

\textsuperscript{80} Payne, supra note 46, at 733–34.
Rate payment securitization often involves the creation of a new special purpose entity (“SPE”) that is separate from the utility itself.\(^{81}\) When an SPE is created, concerns that investors have about the utility’s ability to repay may be somewhat alleviated by the fact that the bonds they are buying are not actually the debt of the utility.\(^{82}\) More important, however, is the fact that a government regulator agrees to ensure that rates are adequate to make payments on the bond.\(^{83}\) And because the special purpose entity has no business of its own, those payments go directly to bondholders.\(^{84}\) In contrast, when a utility issues a non-securitized bond, it must make any payments out of its own revenue, but it may have things other than bond payments to spend its revenue on. The securitization substantially reduces the risk that bondholders will not be repaid, which in turn lowers the interest rate that must be paid on the bond.\(^{85}\)

With a lower interest rate, the utility may be able to borrow enough money to pay off the coal plant, in addition to financing a new, sustainable energy source and paying to facilitate the community’s transition away from the coal plant.\(^{86}\) In this situation, the utility wins because it is able to pay off its coal plant and transition to a sustainable energy source. Utility ratepayers win because they are not stuck paying the bill for two energy plants (the retired coal plant and the new energy source). Communities win because there are resources available to avoid the social harm that could come from shutting down a coal plant that may have been an important part of the local economy. And the environment wins because energy is being produced with low-carbon sources. All of these benefits derive from the fact that securitization can lower interest rates.

### III. How Securitization Can Further Just

\(^{81}\) *Id.* at 734 (suggesting that “investors may be uncomfortable with accepting company-issued debt, even with that debt guaranteed by ratepayers”).

\(^{82}\) Fichera & Klein, *supra* note 55.

\(^{83}\) Payne, *supra* note 46, at 734 (“[S]eparate debt issued by the utility should be sufficient . . . with the explicit understanding that the debt will be paid for by captive ratepayers and that the public utility commission in the state will allow those costs to be passed through for the duration of the bond.”).

\(^{84}\) This direct payment could be accomplished without the creation of an SPE.

\(^{85}\) See Payne, *supra* note 46, at 732–33.

\(^{86}\) Cf. Payne, *supra* note 1, at 322.
ENERGY TRANSITIONS: FOUR BEST PRACTICES

Although securitization sounds like a win-win-win in principle, states’ approaches to securitization have varied, and fair, accountable processes and outcomes are not a guarantee. One concern is the potential for securitization laws to create a windfall for utilities, allowing them to continue to enjoy profits while having ratepayers and workers bear the costs of the utilities’ bad investments.87 The Sierra Club of North Carolina observes that “[w]ith securitization, ratepayers essentially buy out [utility company] Duke Energy’s debt on its non-economic coal plants.”88 Another energy advocacy group warned of the Colorado law’s potential to “tie up ratepayer dollars for decades to come on an economically dead asset” and predicted that the envisioned assistance to coal-reliant workers and communities “will likely be insufficient to meet the true needs of those harmed by the closures.”89 These concerns raise important questions of how much and which costs of the transition to renewable energy should be borne by the public, what a fair approach to the use of securitization entails, and what measures might best be pursued through different laws or institutions altogether.90

A review of this recent spate of coal plant securitization statutes shows that simply passing a securitization statute is not a guarantee of eq-


90 See id. at 2 (arguing that ratepayer increases are not a cure-all and that transitional assistance to coal workers and communities must come directly from state budget allocations.).
uity for ratepayers or coal-reliant workers. Some states’ approaches explicitly prioritize considerations of equitable distribution more than others. These varied approaches illuminate several important elements to maximize the positive impacts of rate payment securitization. These elements include: (1) involving stakeholders in planning and implementing the financing plan; (2) constraining the utility’s use of funds and ensuring the funds go toward public needs, including clean energy investments and transitional economic assistance; (3) facilitating accelerated depreciation of the coal plant; and (4) ensuring the amount raised by the bond is adequate to fully pay off the coal plant.

A. Enable Stakeholder Involvement

First, involving ratepayers in planning for securitized financing can help to maximize the benefit to energy customers. Bond negotiations tend to be dominated by the utility and the financial institutions involved in structuring the bond. As one former Colorado Utilities Commissioner noted, during securitization planning regulators should “ask what incentives are involved when big banks and a big utility work together and whether those incentives align with the public interest.”91 One way of ensuring that the public interest is being served is to allow representatives of ratepayers or other stakeholders to have a say in the terms of the financing. Such participation could be by individual ratepayers, customer advocacy organizations, or NGOs. Ratepayer representative involvement can ensure that the cost to ratepayers is minimized, and therefore their benefit is maximized.92 Involvement by community members can ensure due consideration of the challenges of transitioning to a new energy source. Moreover, stakeholder representatives, if involved in the planning process, could advocate for the remaining three strategies discussed below.

Several state statutes facilitating rate payment securitization provide for public hearings and comments before approving a financing order.93 Such hearings can be an opportunity for stakeholders and their representatives to express their preferences and concerns about a proposed securit-

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92 Id.
organized financing to retire a coal-fired power plant. As examples of procedures conducive to such involvement, in Colorado, stakeholders have opportunities to influence financing orders either during the notice and hearing with the PUC on the utility’s application for a financing order or by petitioning for suspension and review of the financing order after it is issued.\(^{94}\) In New Mexico, stakeholders may influence financing orders by: (1) establishing good cause for a formal hearing within thirty days of the date when notice is given of the filing of the application for the financing order; (2) applying to the PUC for a hearing after the issuing of the financing order; (3) reviewing utilities’ application materials during commission proceedings; or (4) appealing the financing order to the New Mexico Supreme Court.\(^{95}\)

Opportunities for ratepayer and community input at other junctures can enhance this stakeholder input and further the benefits that flow from the transaction, as well. For example, in Missouri, the public has an ongoing right to challenge the financing plans of public utilities. The National Resources Defense Council used this dispute process to successfully pressure a Missouri utility to consider rate payment securitization.\(^{96}\) Thus, involvement from ratepayers and other interested constituencies prior to any planned utility financing can be used to lobby for securitization and the retirement of coal-powered plants.

Community involvement after the transaction has occurred has the potential for additional benefits. In New Mexico, whenever a plant is closed, the utility must provide funds for worker training and community assistance. The funds are distributed in consultation with a community advisory board.\(^{97}\) The New Mexico law also provides for public planning processes to inform the use of transitional assistance funds, including at least three public meetings in the affected community where funds will be spent.\(^{98}\) This community representation after the closing of the coal-fired plant can similarly work to maximize the benefits of the transaction. Stakeholder involvement can help spur securitization as a strategy for coal plant retirement and it can maximize the benefits of securitization while the transaction is being planned and after implementation.

**B. Constrain Utilities’ Use of Funds through Mandates for Public**


Interest Spending

Second, to ensure the maximum environmental and community benefit from the securitization process, utilities should be contractually obligated under the terms of the bond to use the proceeds to meet public needs, especially those public needs associated with the coal-plant retirements. Perhaps obviously, utilities should be bound to actually use the funds they raise for a transition to clean energy sources. A proposed bill in Minnesota makes this an explicit requirement, which, perhaps surprisingly, is unusual among the coal-securitization statutes. This less common restriction on the use of funds could go a long way to maximize the environmental benefit of the transaction. Several states, including Kansas and Montana, have requirements that any investments in new energy sources must have the aim of reducing prices for ratepayers. These measures can assist in maximizing the benefits to ratepayers by ensuring they are not paying more after the transaction.

As discussed throughout this Essay, states can also opt to mandate that funds derived from securitization go toward supporting transitional economic development. Some state statutes, including the Colorado statute and the proposed bill in Minnesota, require that a proportion of funds raised must be used for transition assistance for employees and other community members who were dependent upon the coal-fired plant. This can help to maximize the community development benefit from the securitization transaction.

Again, New Mexico’s law is particularly instructive as a model for marshaling the securitization process toward substantive public energy and economic development needs and mitigating the risk of a private windfall. New Mexico mandates that utilities applying for new energy projects will have those projects “ranked based on their cost, economic development opportunity and ability to provide jobs with comparable pay and benefits to those lost due to the abandonment of a qualifying generating

facility.”102 Utilities are directed to employ local workers where possible.103 The commission is also directed to “prefer resources with the least environmental impacts . . . and those able to reduce the cost of reclamation and use for lands previously mined within the county of the qualifying generating facility.”104 These substantive and procedural provisions help constrain utilities’ discretion and ensure securitization’s public benefits.

Generally, if a utility is free to use the proceeds as it sees fit, inadequate resources may be directed to the transition to renewable energy. If this were to happen, many of the expected benefits of the rate payments securitization would evaporate, and securitization would become merely a bailout for utilities.

C. Facilitate Accelerated Depreciation

Third, ratepayer representatives should advocate for an accelerated depreciation of the existing coal power plant. When planning the refinancing of debt associated with coal-fired power plants, regulators conduct depreciation reviews to ascertain the appropriate payoff amount for the retiring coal plant.105 Accelerating the depreciation schedule would result in a lower payoff amount for the coal plant.106 Absent the securitization structure, that accelerated depreciation would result in ratepayers paying more for the coal plant in the short run, but less in the long run. However, because rate payment securitization allows the utility to pay off the entirety of the coal plant at once with the proceeds of the securitized bond, these temporal tradeoffs can be avoided. Accelerated depreciation reduces the total amount required to pay off the plant. Thus, when that payoff amount is all paid at once, accelerated depreciation creates financial benefits to the utility and the ratepayers who will ultimately repay the bond.107 However, it also results in investors receiving less return over the short run, so having

103 Id.
104 Id.
106 Alexandra B. Klass & Gabriel Chan, Cooperative Clean Energy, 100 N.C. L. REV. 1, 80 (2021).
representatives of ratepayers in negotiations will be essential to advocating for accelerated depreciation. 108

The depreciation schedule of a given retired power plant will vary from plant to plant. Consequently, how to account for depreciation is not explicitly addressed in the state statutes that facilitate rate payment securitization. Although accelerated depreciation “increase[es] debt payments in the short-term,” it does so “in a way that results in . . . long-term benefits to ratepayers.” 109 Nonetheless, a prerequisite to advocating for accelerated depreciation is the ability for stakeholders to have their perspectives heard prior to finalizing the financing plan. Thus, the opportunities for ratepayer input described above are key to giving ratepayers the opportunity to advocate for accelerated depreciation.

D. Facilitate Complete Payoff of the Coal Plant

Fourth, it is important that the amount of money raised by the bond is adequate to pay off the entirety of the coal-fired power plant and any associated costs. As was discussed in Part III.B, the savings for ratepayers from rate payment securitization flow from the fact that the retired coal-fired plant is paid off. This means that ratepayers no longer have to pay for the cost of the coal plant and instead pay only for the lower cost of the new energy plant. However, if the coal plant is not paid off in its entirety, the benefits to the ratepayers will be reduced.

The most effective version of rate payment securitization legislation will allow for complete repayment of the remaining value of the retired coal plant. A debate over this issue is currently underway in Wisconsin. As mentioned above, the existing securitization legislation only permits utilities to pay off unrecovered environmental control costs—amounts the utility expended on pollution prevention or other environmental control. This leaves some amount of the value of the coal plant unpaid, increasing the financial burden on ratepayers. Facilitating the repayment of all amounts owed on the coal plant would maximize savings for ratepayers. Some proponents in Wisconsin are advocating for this change. 110

108 “As one utility spokesman described it, it is the equivalent of ‘a rapid mortgage payoff in which utility investors forsake profits they otherwise might have made on the property.’ “ Payne, supra note 46, at 733–34.
109 Klass & Chan, supra note 106, at 80.
110 Kari Lydersen, As coal plants close, advocates want relief for Wisconsin ratepay-

ers, ENERGY NEWS NETWORK (Feb. 25, 2021).
CONCLUSION

Securitization of the debt associated with early retirements of coal-fired power plants offers several important features to help overcome barriers to those retirements. Centrally, without the backing of public regulators, the cost of new debt to pay for clean energy could be cost-prohibitive for utilities and their ratepayers. Thus, in the absence of securitization, utilities are incentivized to either keep obsolete plants operating or to pass exorbitant costs to ratepayers to cover old debts alongside the new debts associated with clean energy investments. Meanwhile, without intervention, workers and communities reliant on coal plants have similar incentives to oppose coal plant retirements due to their risk of unmitigated economic losses.

State securitization laws illustrate how protections for utilities, consumers, and workers may all be achieved when states back energy transition bonds geared toward reducing payments for ratepayers and easing the local economic transition. However, mere passage of a securitization law does not guarantee equitable or effective distributions of these risks and opportunities. The most promising statutes provide for several key provisions. First, stakeholder and ratepayer involvement, such as through public hearings to evaluate potential financing orders, affords the public an opportunity to voice concerns and influence how securitization operates in their state. Second, limitations on how securitization funds are used can help ensure that those funds are directed toward public needs rather than private gain. Third, stakeholder opportunities to advocate for accelerated depreciation can save ratepayers more in the long run. And fourth, ratepayers will be most protected where securitization provides for full repayment of the value of the retired coal plant so that no additional costs linger to burden ratepayers.