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## Renewing Electricity Competition

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# RENEWING ELECTRICITY COMPETITION

DAVID SCHRAUB\*

## ABSTRACT

*The scholarly literature on law and social movement has historically focused on public law issues like environmentalism, reproductive rights, and race relations, while staying far away from business and firm behavior. Business behavior was easily understood as that of self-interested profit-maximizers and thereby left to the economics. Recently, however, social movement theorists have begun paying more attention to the business world. While traditional economic models can explain why businesses pursue higher profits, greater market shares, and superior regulatory climates, they are limited in their ability to explain how wish becomes reality. The formation and identification of market opportunities are products of social forces, and firms are part of that process—both shaping and being shaped by social dynamics which create and recreate the economic terrain.*

*This Article joins that burgeoning literature by applying a social movements approach to the energy law field. Specifically, it looks to how voluntary Renewable Energy Credit (REC) sales—selling the “clean” in “clean electricity”—could restart the moribund movement towards increased electricity market competition (known as “restructuring”). While electricity restructuring gained considerable momentum from the late 1970s through the 1990s, the movement was crippled by the high-profile Enron collapse in 2001. Efforts to restart the debate have foundered as restructuring proponents have had no point of entry to connect with consumers or influence policymakers in states dominated by incumbent electricity monopolies. Voluntary REC sales, which entail sale of an electricity “product” that bypasses the physical transmission network, offers a “foot in the door” for new market entrants who can connect with consumers and reshape their public image free from interference by the extant monopoly. From a business standpoint, the benefit of entering the voluntary REC is less about direct revenues or profits from the sale, the traditional economic markers of success. Rather, REC sales are valuable for reasons well known to social movement theorists—they can establish relationships and alliances in previously untapped social arenas and alter public understandings of concepts and ideologies critical to the firm’s overall interests.*

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## I. INTRODUCTION

For most of its history, the American electricity market was seen as the quintessential natural monopoly. Regulated both by state utility commissions (generation and retail sales) and the federal government (wholesale transmission), it was assumed that electricity markets were unamenable to competition due to the high cost and inherently inefficient nature of replicating the massive infrastructure of transmission lines and local connectors necessary for a workable electricity grid. However, beginning almost accidentally with the Public Utility Regulatory Policies Act (PURPA),<sup>1</sup> and continuing in earnest through the 1990s, this began to change. Led by the Federal Energy Regulatory Commission (FERC), open-access rules were designed to create a level playing field for new market-entrants who could piggyback on previously created infrastructure at competitive rates. These reforms, known as electricity deregulation or restructuring, promised consumers a true choice in their electricity provider and with it a new era of electricity competition.

Today, this momentum has largely stalled out. California aborted its transition to electricity competition following the 2000 energy crisis and Enron collapse, and many states which had previously been considering deregulating their electricity markets likewise held those plans in abeyance. As of 2010, over a dozen states (largely but not exclusively in the Northeast) have implemented electricity deregulation.<sup>2</sup> Concerns over market volatility and entrenched opposition from local utility monopolies and regulators have halted competition in the remainder of the United States.

This Article suggests that there may be a possibility for electricity competition to regain its footing—and it may stem from an unlikely source: the marketing and sale of voluntary Renewable Energy Credits (RECs). RECs are, in essence, purchases of the “clean” in “clean electricity.” Specifically, they guarantee that a certain amount of clean electricity has been added to the grid. Voluntary RECs are those purchased by individual customers as part of an effort to be responsible citizens (as opposed to RECs that are purchased by utili-

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1. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended in scattered sections of 5, 15, 16, 26, 30, 42, and 43 U.S.C.).

2. See *Status of Electricity Restructuring by State*, U.S. ENERGY INFO. ADMIN. (Sept. 2010), [http://www.eia.gov/electricity/policies/restructuring/restructure\\_elect.html](http://www.eia.gov/electricity/policies/restructuring/restructure_elect.html).

ties and other service providers to satisfy mandatory renewable energy purchase obligations) and comprise a significant share of overall REC sales.<sup>3</sup>

Understandably, most scholarship on RECs has focused on their environmental promise—for example, promoting the development of green power sources or reducing quantities of air pollution.<sup>4</sup> But the relatively new emergence of RECs has caused scholars to overlook how they are situated within, and may have unanticipated effects on, the broader electricity marketplace.<sup>5</sup> This Article provides the first substantive analysis of how REC markets might impact larger debates over electricity restructuring. Analyzing the issue from a novel law-and-social-movements perspective, I contend that voluntary REC sales offer a unique opportunity for external market participants to get a “foot in the door” within otherwise closed monopoly states. From there, they can build up political influence (and a consumer base) that will allow them a more realistic chance of influencing the insular state regulatory bodies which largely control the restructuring agenda.

This Article proceeds in three parts. Part I introduces the idea of applying the literature on social movements to the business and economic sector (here, electricity markets). Social movement literature has traditionally focused on issues like abortion, gay marriage, or environmentalism; applying these tools to debates over regulated in-

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3. See JENNY HEETER ET AL., U.S. DEP'T OF ENERGY, TECH. REP., NREL/TP-6A20-56128, MARKET BRIEF: STATUS OF THE VOLUNTARY RENEWABLE ENERGY CERTIFICATE MARKET (2011 DATA) 4-6 (2012), available at <http://www.nrel.gov/docs/fy12osti/56128.pdf> (estimating a roughly 20% increase in voluntary REC sales between 2010 and 2011); Lori Bird & Elizabeth Lokey, *Interaction of Compliance and Voluntary Renewable Energy Markets*, ELECTRICITY J., Jan.-Feb. 2008, at 18, 19 (pegging the voluntary REC market as comprising approximately 20% of all REC sales with a 35% annual growth rate); Michael Gillenwater, *Redefining RECs—Part 1: Untangling Attributes and Offsets*, 36 ENERGY POL'Y 2109, 2111 (2008) (“The voluntary purchase of RECs accounted for 46 percent of US consumer green power sales in 2005, and REC markets are growing faster than other segments of green power markets.”).

4. See, e.g., Magali A. Delmas & Maria J. Montes-Sancho, *U.S. State Policies for Renewable Energy: Context and Effectiveness*, 39 ENERGY POL'Y 2273 (2011); Jesse Glickstein, Comment, *New York's Proposed Solar Renewable Energy Market: Lessons Learned from Other States' SREC Markets and Recommendations in Moving Forward*, 30 PACE ENVTL. L. REV. 1248 (2013); Matthew McDonnell et al., *The Potential and Power of Renewable Energy Credits to Enhance Air Quality and Economic Development in Arizona*, 43 ARIZ. ST. L.J. 809, 809-11 (2011). In addition, most scholarship on RECs has focused on a particular subset of the market—their use in complying with state-mandated Renewable Portfolio Standards (RPS) (the compliance market). This overlooks the function of the voluntary market in purchasing RECs—in which end-user consumers elect to purchase RECs to offset some or all of the portion of their electricity supply that comes from non-renewable sources. See *infra* Part II.A.

5. Cf. Lincoln L. Davies, *Alternative Energy and the Energy-Environment Disconnect*, 46 IDAHO L. REV. 473, 474 (2010) (“It is one of the most important—and unspoken—paradoxes of the modern American regulatory state: Energy law and environmental law rarely, if ever, merge.”).

dustries is decidedly less common. Yet a social movement approach can provide useful insights on seemingly standard firm behavior—pressing for regulatory reform and even marketing products to consumers—and doing so illuminates otherwise unappreciated elements in the development of energy market regulation. Energy market participants behave like social movement actors in seeking to manage and influence surrounding stakeholders and parties as a means of accessing and altering political and regulatory structures. Several critical moments in the history of electricity regulation—the initial move (at the turn of the century) towards a monopoly model of electricity regulation, the later challenges to that model (beginning in the 1970s), and the retrenchment of the monopolies (following the Enron collapse)—were significantly influenced by, and in large part enacted through, social movement processes.

Part II discusses Renewable Energy Credits—the “clean” in “clean electricity.” Though RECs are traded in two primary markets, legal scholarship to date has focused entirely on one—the “compliance” market whereby RECs are purchased by utilities to meet state-mandated Renewable Portfolio Standards (RPS). This Article is the first full law review article to substantially address the second, “voluntary,” REC market.<sup>6</sup> In the voluntary market, individual consumers buy RECs to offset some or all of their “dirty” power usage. This Part introduces the mechanics of this market, as well as some of the unique policy dilemmas posed by voluntary REC sales. It then proceeds to situate REC regulation within the division of state and federal responsibility that characterizes the electricity market generally. Voluntary RECs are uniquely positioned, as they are neither the clear domain of state or federal regulatory bodies. Although voluntary REC sales are almost always interstate, the federal government has largely disclaimed any responsibility over them (save generic consumer protection standards administered through the FTC). And while states have robustly regulated the REC compliance market (which makes sense, given that these markets are created through state regulatory mandates), there is a scarcity of rulemaking on voluntary REC sales. The Dormant Commerce Clause, moreover, significantly constrains the ability of state regulators to maintain a monopoly in the REC context akin to what is permissible in retail electricity distribution generally.

Finally, Part III explains why these characteristics of the voluntary REC market provide a unique opportunity to restart the debate over retail electricity competition in monopoly states. Electricity

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6. For other key resources on voluntary RECs, see Gillenwater, *supra* note 3, at 2109; Kelly Crandall, Comment, *Trust and the Green Consumer: The Fight for Accountability in Renewable Energy Credits*, 81 U. COLO. L. REV. 893 (2010).

competition has long struggled against the simple logistical fact that a natural monopoly—whoever controls the wires—stands between producers of power and their ultimate consumers. Voluntary RECs are unique in the energy marketplace in that they offer an opportunity for consumers, even in states that otherwise lack electricity competition, to engage directly with the electricity marketplace. In short, through voluntary RECs foreign players in the electricity market can sell an “electricity product” (albeit not electricity itself) directly to consumers—even in monopoly states.

Voluntary REC sales do not alter who actually provides the customer with electricity, nor do they logically mandate that such sales be permitted. But voluntary REC sales still can provide a boost to competitive forces by altering the political landscape of monopoly states. Even limited competition creates stakeholders who might favor broader liberalization of the marketplace and, by virtue of their new foothold in monopoly states, will be better positioned to advocate for reforms. Moreover, REC providers can seek to convert their consumers into constituents—leveraging their interaction with their customer base to create grassroots momentum for other friendly reforms (either full competition or partial measures such as increased support for distributed generation). This mechanism—relatively small avenues of competition creating momentum for further liberalization—has been a recurrent theme in the history of electricity market deregulation.

To be clear, I am not taking a position on the policy merits of retail electricity restructuring. This is a complicated issue under the best of circumstances, and it is compounded by the unique energy landscape of each of the fifty states which must ultimately decide—one way or the other—whether to allow retail competition. Nor am I arguing that retail restructuring will necessarily have positive environmental effects—this, too, is controversial and uncertain, and it may be that the regulated or deregulated structure of the market has little ultimate effect on environmental outcomes.<sup>7</sup> This Article is rather descriptive in nature: the voluntary REC market offers the opportunity for greater competition within the electricity sector regardless of whether state utility commissions want it or not, and that in

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7. See, e.g., M.K. Heiman, *Expectations for Renewable Energy Under Market Restructuring: The U.S. Experience*, 31 ENERGY 1052, 1058-61 (2006) (noting that there appears to be little pattern to regulated and deregulated states' approaches in promoting renewable energy consumption); Karen Palmer & Dallas Burtraw, *The Environmental Impacts of Electricity Restructuring: Looking Back and Looking Forward*, 1 ENVTL. & ENERGY L. & POLY J. 171, 203 (2006) (“The lessons from our experience with restructuring to date . . . suggest that other factors affecting the electricity sector may have bigger effects on the environment and on electricity consumers than the move to competition.”).

turn provides an opening for pro-competition entities to gain a foothold and press the case in otherwise inhospitable terrain.

## II. ELECTRICITY RESTRUCTURING AS SOCIAL MOVEMENT

The “social movement” as a concept in law and social sciences, rarely is applied to a field as seemingly staid and buttoned-up as the energy sector. Yet, in the context of many important developments in electricity market regulation, a social movement approach provides important insights. As will be explained in more depth below, the development of electricity market regulation has long been characterized by competing stakeholders who sought to form and reform this regulatory structure to suit their discrete interests. One of the more stark manifestations of this social conflict was the debate over electricity restructuring—whether to abandon the protected electricity monopoly and instead introduce market-based competition. This debate, which played out across nearly every state as well as the federal government, pitted several large institutional players against each other—including federal and state agencies, insurgent electricity suppliers, and incumbent monopolies.

The cluster of energy market participants who favor restructuring retail markets—changing the way that the electricity market functions in a manner which would inevitably alter the distribution of the fruits of that market—represents a social movement. Their opponents in the electricity sector (incumbent monopolies, certain utility commissions, etc.) in turn comprise the “countermovement.”<sup>8</sup> Thinking of the restructuring debate in social movement terms helps illuminate how the comparatively minor arena of REC sales can alter the relevant political dynamics of the electricity restructuring debate more generally.

### A. *Social Movements Analysis and Firm Behavior*

When we hear about “social movements,” we tend to think about hot-button social issues such as gay rights, the environment, or abortion.<sup>9</sup> Few scholars have attempted to apply social movement insights

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8. See Mayer N. Zald & Bert Useem, *Movement and Countermovement Interaction: Mobilization, Tactics, and State Involvement*, in SOCIAL MOVEMENTS IN AN ORGANIZATIONAL SOCIETY 247, 247-48 (Mayer N. Zald & John D. McCarthy eds., 1987) (“[M]ovements of any visibility and impact create the conditions for the mobilization of countermovements. By advocating change, by attacking the established interests, by mobilizing symbols and raising costs to others, they create grievances and provide opportunities for organizational entrepreneurs to define countermovement goals and issues.”); David S. Meyer & Suzanne Staggenborg, *Movements, Countermovements, and the Structure of Political Opportunity*, 101 AM. J. SOC. 1628, 1630 (1996) (“Any social movement of potential political significance will generate opposition.”).

9. See, e.g., DONATELLA DELLA PORTA & MARIO DIANI, SOCIAL MOVEMENTS: AN INTRODUCTION 1-2 (2009) (tracing the genesis of the research into social movements to

to business and economic disputes (at least without a traditional progressive hook, as in labor or environmental disputes, wherein the business is typically cast as the antagonist). Scholars sometimes specifically separate out “economic” and “social” actors, with “social movements” being a component of the latter set.<sup>10</sup> After all, economic motives can easily explain why firms expend effort to persuade policymakers to alter regulatory structures (not to mention why they try to persuade consumers to purchase their offerings).<sup>11</sup> Hence, it is unsurprising that social movement theory initially grew out of a desire to explain mass action in contexts such as the environmental movement, where there were no obvious incentives for coordination.<sup>12</sup>

But while perhaps the “why” of business behavior is not illuminated by social movement literature, the “how” certainly is. There is, after all, more than one way to turn a profit—indeed, one of the hallmarks of the modern capitalist system is that it nuzzles out profit opportunities regardless of how the regulatory system is contoured. Self-interest can take us only so far in determining why the opportunities proffered by certain regulatory structures are preferred over others and why particular economic opportunities are recognized and pursued (or overlooked and dismissed) in particular social contexts.<sup>13</sup> Moreover, noting the obvious truth that firms *want* favorable policies or friendly consumers does little to explain how they *succeed* in bringing that state of affairs into existence. Social movement behavior

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radical protests in the late 1960s); Reva B. Siegel, *Constitutional Culture, Social Movement Conflict and Constitutional Change: The Case of the de facto ERA*, 94 CALIF. L. REV. 1323, 1328 n.13 (2006) (collecting articles devoted to “the role of social movements in constitutional change”). I am as guilty of this sin as any in my own social movement related scholarship, which has primarily focused on issues of race and sexual orientation. See, e.g., David Schraub, *Sticky Slopes*, 101 CALIF. L. REV. 1249 (2013) [hereinafter Schraub, *Sticky Slopes*]; David Schraub, *The Perils and Promise of the Holder Memo*, 2012 CARDOZO L. REV. DE NOVO 187.

10. See Edward L. Rubin, *Passing Through the Door: Social Movement Literature and Legal Scholarship*, 150 U. PA. L. REV. 1, 4 (2001) (distinguishing between the “economic” and “social” spheres of public life and stating that “[s]ocial movements belong to this [social] sphere of society”).

11. See Edward L. Rubin, *Public Choice, Phenomenology, and the Meaning of the Modern State: Keep the Bathwater, but Throw Out That Baby*, 87 CORNELL L. REV. 309, 352 (2002) (“There is nothing cynical about treating the owner of a business, or a consumer buying antichokes, as trying to maximize his material self-interest. . . . [Both] would cheerfully agree that they are self-interest maximizing.”).

12. See Rubin, *supra* note 10, at 7 (noting that the environmentalism movement “was remarkable for the diffuse and remote character of the concerns that animated its participants, for the lack of any particularized economic interests in its basic goals, and for the sophisticated organizational efforts that sustained it”).

13. See Rubin, *supra* note 11, at 346 (arguing against an “ahistorical” public choice theory and contending that social actors are motivated by “intersubjective understandings [that] are heavily dependent on temporally specific attitudes and the evolution of ideas from one generation to the next”); *id.* at 351 (noting the importance of “agenda-setting” as the “pre-empirical and generally pre-analytic” set of decisions that govern how social actors determine “where [they] will go and what [they] will look for”).

bridges the gap between the desire of firms to alter economic or regulatory climates and actually effectuating the change.

In this vein, a growing body of literature explores the intersection of social movements and business behavior.<sup>14</sup> Business organizations “are strategic actors, intent on maintaining their social position and influencing their environment.”<sup>15</sup> Threats from opposing social groups—for example, a consumer boycott—can challenge “an organization’s field position, undermining the ‘existing relationships and meanings and order’ by which that position is defined.”<sup>16</sup> Consequently, firms have no choice but to participate in the field of social movement activity in order to preserve and expand their economic opportunities.

As Brayden King and Mary-Hunter McDonnell note, articles exploring the intersection of social movements and business practice typically focus “only on direct responses such as wins or losses, resistance or concession.”<sup>17</sup> We know something about the outcomes of social movement/business interaction but very little about the processes through which these interactions take place. And even scholars who are interrogating the “how” question usually start with the presumption that social movements and firms are oppositional and proceed to explore how businesses strategically manage the threats posed by social movement activism. For example, firms might engage in prosocial behavior to burnish their image in response to a consumer boycott.<sup>18</sup> In certain situations, firms may even align or sponsor a social movement boycott targeted at certain practices in order to head off more radical critiques of their own behavior.<sup>19</sup>

In other words, while this literature has examined how firms *respond* to social movements, and occasionally looks to their participation *in* social movements, it has not yet identified the firm *as* a social

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14. See, e.g., Mary-Hunter McDonnell & Brayden King, *Keeping up Appearances: Reputational Threat and Impression Management After Social Movement Boycotts*, 58 ADMIN. SCI. Q. 387 (2013); Edward T. Walker & Christopher M. Rea, *The Political Mobilization of Firms and Industries*, 40 ANN. REV. SOC. 281 (2014); Mary-Hunter McDonnell, *If You Can't Beat Them, Join Them: Corporate Sponsorship of Social Movement Boycotts* (Aug. 29, 2012) (unpublished manuscript), available at [http://papers.ssrn.com/sol3/Papers.cfm?abstract\\_id=2137371](http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2137371).

15. McDonnell & King, *supra* note 14, at 388.

16. *Id.* (quoting Neil Fligstein & Doug McAdam, *Toward a General Theory of Strategic Action Fields*, 29 SOC. THEORY 1, 5 (2011)).

17. *Id.* (citing Brayden G. King, *A Political Mediation Model of Corporate Response to Social Movement Activism*, 53 ADMIN. SCI. Q. 395 (2008)); see also Joseph E. Luters, *The Economics of Movement Success: Business Responses to Civil Rights Mobilization*, 111 AM. J. SOC. 963, 964 (2006); Rachel Schurman, *Fighting “Frankenfoods”: Industry Opportunity Structures and the Efficacy of the Anti-Biotech Movement in Western Europe*, 51 SOC. PROBS. 243 (2004).

18. See McDonnell & King, *supra* note 14, at 388-89.

19. See *id.* at 389.

movement. That is to say, run-of-the-mill industry behavior—lobbying to alter regulatory climates or deciding to introduce new market products—has not typically been characterized in social movement terms. Yet there is no principled reason for this gap.<sup>20</sup> Social movements can encompass all sorts of ends—they represent nothing more than “a set of opinions and beliefs in a population which represents preferences for changing some elements of the social structure and/or reward distribution of a society.”<sup>21</sup> Social movements are a species of social conflict wherein opposing actors engage, negotiate, or fight to control particular social resources.<sup>22</sup> The day-to-day ends of a business—protecting and enhancing market share, identifying and exploiting economic opportunities—certainly qualify as among the sort of resources social actors will fight to attain. Social movement analysis can thereby provide novel modes of identifying and analyzing avenues of change relevant to firms.

The social movement perspective offers assistance in identifying productive firm behavior in three ways. First, it broadens who is considered to be a relevant player in producing the sorts of changes desired by economic actors. Political and economic change is multidirectional; it emerges from a multitude of different sources both near and far from the immediate point of controversy.<sup>23</sup> The relationship between a movement and the political or social structures it seeks to influence is not hermetically sealed off from surrounding society—social movements influence and are influenced by forces which on their face appear to be entirely external to the competing combatants. Seemingly unrelated social forces or unengaged political actors can have profound impacts on the success or failure of the movement’s

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20. See, e.g., Neil Fligstein, *Markets as Politics: A Political-Cultural Approach to Market Institutions*, 61 AM. SOC. REV. 656, 657 (1996) (identifying firms as social movement actors engaged in an attempt to control the relevant market place).

21. John D. McCarthy & Mayer N. Zald, *Resource Mobilization and Social Movements: A Partial Theory*, 82 AM. J. SOC. 1212, 1217-18 (1977).

22. See Alain Touraine, *An Introduction to the Study of Social Movements*, 52 SOC. RES. 749, 750-51 (1985) (identifying social movements as a special sort of social conflict and arguing that a “conflict presupposes a clear definition of opponents or competing [sic] actors and of the resources they are fighting for or negotiating to take control of”).

23. Sometimes the social movement dynamic is described as “bidirectional” in that while the effects of social movement lobbying influence politics, political dynamics also impact the internal structure and preferences of social movement actors. See Cary Coglianese, *Social Movements, Law, and Society: The Institutionalization of the Environmental Movement*, 150 U. PA. L. REV. 85, 86 (2001) (noting that “law reform efforts themselves may have an impact on public opinion, with action by courts and other legal institutions sometimes lending legitimacy to the claims advanced by social movements”). I prefer “multidirectional” to emphasize how even entities that are not directly implicated in the movement or regulatory structure can have outsized impacts on the development of social change.

agenda. These dynamics are as relevant to the sorts of social developments sought by businesses as they are to those pursued by more traditional movements.

The social movement literature (as the name implies) generally views all of society as its canvas. This is a broader outlook than one typically finds in the economic context, which focuses on those entities whose direct financial or institutional stakes in the relevant industry give them straightforward, rational incentives to act.<sup>24</sup> So while an economic account of electricity regulation might focus on the utility companies or federal and state regulatory commissions, it would likely pay little attention to, say, the travails of a local trolley car franchise<sup>25</sup> or trends in economic theorizing.<sup>26</sup> But even in relatively arcane and highly regulated contexts, the development and alteration of regulatory structures involves much more than big companies lobbying big agencies in a void.<sup>27</sup> Often times, it is precisely these seemingly external and unrelated social players that play an outsized influence in how social change progresses.

To understand the manner in which “unaffiliated” actors can affect the course of social reform, consider accounts about how social movement victories can act to “mobilize” supporters (or “countermobilize” opponents). The traditional form of this story

assumes a simple bifurcation between the supporters and opponents of [the policy], with a substantial chunk of the population indifferent and on the sidelines. A major victory by the supporters of [the policy] mobilizes its opponents, who see their interests or values threatened, but it does not affect those who had no opinion on the matter in the first place<sup>28</sup>

But it is evident that this divide does not always hold—a social movement victory can alter the relevant political coalitions entirely, for example, by “threatening the[] discrete and previously unaffected interests” of hitherto neutral groups.<sup>29</sup> Likewise, it can add supporters if the victory creates new bonds of affinity or interest that link together groups previously disconnected from the relevant social con-

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24. See Rubin, *supra* note 11, at 310-11 (noting the assumption of public choice theorists that behavior emerges from rational actors seeking to maximize their self-interest).

25. See *infra* notes 55-58.

26. See *infra* notes 71-74.

27. See Walker & Rea, *supra* note 14, at 293 (“[T]he politics of business need not be confined to explicit attempts to elect sympathetic candidates or facilitate the work of friendly legislators. Business may also act as an activist and an issue entrepreneur, with clear economic interests but, to that end, with a clear focus on developing political and ideological support of its policy positions.”) (citation omitted).

28. Schraub, *Sticky Slopes*, *supra* note 9, at 1259.

29. *Id.* at 1259-60.

troversty. In this way, analyzing social movement reform prospects requires keen attention not just to engaged players or even those with obviously relevant but currently “inactive” interests.<sup>30</sup> “Neighboring” social spaces<sup>31</sup> also can play an important role in social movement prospects where particular reform paths create the opportunity to mobilize parties which might otherwise be disinterested.

Nor should this analysis restrict itself solely to traditional political developments. Technological and economic changes, too, can shift relevant social movement dynamics and create new opportunities for coalition-building and political lobbying.<sup>32</sup> Jack Balkin and Reva Siegel use the example of copyright in the internet age—technological innovations sharpened the tension between intellectual property rights and First Amendment protections, and stakeholders on both sides mobilized to promote different regulatory theories protective of their interests (and, I would add, exploit the regulatory lacunae that became apparent as the technological landscape outpaced formal governing laws and policies).<sup>33</sup>

Second, a social movement perspective gives insight into the processes by which firm behavior is altered by surrounding social climates. The move to the regulated-monopoly model of electricity regulation in the early twentieth century, for example, profoundly influenced how electricity utilities were perceived by the public (partners in a shared enterprise of prosperity rather than rapacious robber barons); it also had the not-unintentional effect of locking the then-dominant electricity providers into a privileged (and near-unassailable) economic position.<sup>34</sup> And the reforms need not be so obviously stark to have outsized impacts. Seemingly small changes in a political, economic, or regulatory structure can have big effects if they

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30. ERIC M. PATASHNIK, REFORMS AT RISK: WHAT HAPPENS AFTER MAJOR POLICY CHANGES ARE ENACTED 156 (2008) (noting the importance of the “potential preferences of constituents who could become active and attentive if provoked”).

31. “Neighboring,” in this context, means a social entity that is not directly implicated in the controversy but nonetheless maintains significant connections to the participants. For example, in the desegregation context, advocates of community schooling would be a neighboring space—they did not have an inherent stake in the debate but their interests were variously implicated by either side as the desegregation movement progressed. See Schraub, *Sticky Slopes*, *supra* note 9, at 1260 & n.40. In the electricity restructuring context, examples of potential neighboring spaces might include land use advocates, solar panel manufacturers, or industrial trade organizations.

32. See Jack M. Balkin & Reva B. Siegel, *Principles, Practices, and Social Movements*, 154 U. PA. L. REV. 927, 933 (2006) (“[T]echnological and economic changes produce political contestation and social movement organization that in turn mediate the significance of such changes in the legal system.”).

33. *Id.*

34. See *infra* Part I.B.1.

alter (for example) which groups have access to consumers, regulators, and other important stakeholders.<sup>35</sup>

Social movements, of course, are constantly crafting changes both large and small in the communities they operate in. These changes create new political and economic opportunities that can destabilize even longstanding social arrangements. In their study of the development of the American wind energy market, Wesley Sine and Brandon Lee identify several means by which social movement activity can create or promote new entrepreneurial opportunities. First, it can disrupt traditional institutional arrangements, creating space for new entrants.<sup>36</sup> Second, it can alter the values favored by regulators, “creating supportive contexts for new types of entrepreneurial activity.”<sup>37</sup> Third, it can reduce the costs of identifying and mobilizing around new opportunities by elevating the salience of hitherto unrecognized opportunities.<sup>38</sup> Each of these dynamics can be observed over the course of the history of electricity regulation.

For example, the burgeoning environmental movement spurred the passage of PURPA as a means of enabling small, more sustainable generators into the electricity market. This development had the unexpected side effect of cracking open the generation sector and in doing so, falsified the long-standing presumption that large generation projects (of the sort that could only be launched by a state-guaranteed monopoly) were the most cost-effective means of producing power.<sup>39</sup> Likewise, the “trend” of deregulation—which by the 1970s had become a popular slogan of reform for both consumer advocates and economic theorists—played an important role in changing how an important regulatory actor (FERC) assessed its stance vis-à-vis the electricity industry.<sup>40</sup> Part IV will suggest that one reason the growing voluntary REC market might help renew the push for electricity competition is that it provides a means for foreign entrants to get a “foot in the door” in otherwise closed marketplaces, giving them a foothold from which they can more effectively lobby policymakers and constituents.<sup>41</sup>

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35. Cf. Amy Hillman & Gerald Keim, *International Variation in the Business-Government Interface: Institutional and Organizational Considerations*, 20 ACAD. MGMT. REV. 193, 212 (1995) (noting the range of formal and informal constraints which effect how businesses interface with regulators and policymakers).

36. See Wesley D. Sine & Brandon H. Lee, *Tilting at Windmills? The Environmental Movement and the Emergence of the U.S. Wind Energy Sector*, 54 ADMIN. SCI. Q. 123, 124 (2009).

37. *Id.*

38. *See id.*

39. *See infra* notes 64-70.

40. *See infra* notes 71-74.

41. *See infra* Part III.

Third, the social movement account recognizes and explores how firms affirmatively shape attitudes and create support for their preferred structures. Companies are “actively engaged in the production and maintenance of meaning for constituents, antagonists, and bystanders or observers,” “framing” events or activities to carry friendly, amenable meanings.<sup>42</sup> Creative entrepreneurs find ways to link discrete interests of unaffiliated groups to previously irrelevant policy debates or create bonds of affinity that cause the group to consider itself an ally of the entrepreneur’s project. Companies regularly seek to develop these relationships with their consumers, through ad campaigns, marketing, and other activities designed to create a sense of kinship and social bond.<sup>43</sup> Much of the instinct behind corporate leveraging of “grassroots” (or grassroots-like) social mobilization lies precisely in the fact that it is perceived as less obviously self-interested than pure corporate lobbying.<sup>44</sup>

Again, this opportunity for firms to construct favorable conditions for pursuing their economic agenda resonates with the story I will tell in Part IV. The voluntary REC market has the potential to give foreign firms unprecedented access to consumers in monopoly states. And the context of that access could not be more pro-social: Environmentalism! Responsible consumption! Saving the planet! This access can be leveraged to create positive relationships with the broader electricity consumption community, and that in turn can significantly alter the political terrain faced by state utility commissioners who would otherwise face little countervailing pressure to that exerted by the incumbent monopolies.

In short, the social movements approach allows for a society-wide lens, even in seemingly narrow and esoteric contexts. In terms of specific firm behaviors, it looks to how companies respond to newly created opportunities that emerge when preexisting political, social, or economic arrangements are reshuffled; it also recognizes and explores how firms create these alterations to promote amenable change. These insights will form the locus of the story, told in Part IV, of how voluntary REC sales could have an outsized impact on retail electricity restructuring debates. Before turning to that, however, it is useful to briefly explore the prior history of electricity market competition from inside this social movement lens.

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42. Robert D. Benford & David A. Snow, *Framing Processes and Social Movements: An Overview and Assessment*, 26 ANN. REV. SOC. 611, 613 (2000); see McDonnell & King, *supra* note 14, at 389 (“Organizations rely on the approval of relevant others, or ‘target audiences,’ to obtain needed resources and survive. As part of their ongoing impression management efforts, organizations make claims and engage in performances that cultivate positive perceptions among these audiences.”) (citations omitted).

43. See *infra* Part III.B.

44. See Walker & Rea, *supra* note 14, at 292-93.

*B. Electricity Monopolies and Electricity Restructuring:  
Three Vignettes*

Even compared against other elements of the modern administrative state, electricity markets are governed by an unusually complex regulatory structure. A full account of this history has been done with great thoroughness elsewhere and is beyond the scope of this Article.<sup>45</sup> Here, I provide three short vignettes from critical moments in the history of electricity regulation that help demonstrate the usefulness of the social movements perspective. Viewing these developments—the origins of the electricity monopoly, the emergent challenge by competition advocates to that model, and the eventual stalling of restructuring efforts—from a social movement lens illuminates how even seemingly pure economic decisions are impacted by sociological considerations. This characteristic will become critical in understanding the outsized role REC trading may play in pushing the restructuring debate forward in the coming years.

*1. The Development of Energy Monopolies*

In its first few decades, electricity production and sales were largely unregulated.<sup>46</sup> Competition thrived as a multitude of new firms sought to gain market share over the *terra nova* of the electricity marketplace. By the 1920s, however, the electricity market quickly began to consolidate, as technology allowed greater levels of energy production and firms started to take advantage of economies of scale.<sup>47</sup> Starting at the turn of the twentieth century, farsighted electricity executives saw the benefits of removing their industry from the unbridled free market and instead ensconcing themselves as publicly regulated industries.

Electricity seemed to be the quintessential example of a natural monopoly.<sup>48</sup> Effective competition between firms would require the creation of multiple redundant and inefficient power transmission and distribution systems. As early as 1898, electricity mogul Samuel Insull warned against the ruinous effects of electricity competition and urged the creation of publicly regulated electricity monopolies

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45. For a more thorough discussion, see generally RICHARD F. HIRSH, *POWER LOSS: THE ORIGINS OF DEREGULATION AND RESTRUCTURING IN THE AMERICAN ELECTRIC UTILITY SYSTEM* (1999); Joseph P. Tomain, *Electricity Restructuring: A Case Study in Government Regulation*, 33 *TULSA L.J.* 827 (1998).

46. See Tomain, *supra* note 45, at 830.

47. *Id.*

48. See RICHARD A. POSNER, *NATURAL MONOPOLY AND ITS REGULATION* 1 (1999) (defining a natural monopoly as where the “entire demand within a relevant market can be satisfied at lowest cost by one firm rather than by two or more”).

with exclusive franchise areas.<sup>49</sup> This proposal evolved into the idea of a “regulatory compact” whereby the government “would set the rates that the monopoly could charge and would allow (as opposed to ‘guarantee’) the utility to earn a reasonable return on its prudent capital investment.”<sup>50</sup>

The regulatory compact had several things going for it as a policy matter. From a regulatory perspective, this model recognized the utilities’ natural monopoly while guarding against discriminatory practices or exploitative pricing.<sup>51</sup> From a social standpoint, the compact was a quintessential example of progressive-era regulation, “built on principles of scientific management and regulation by experts” rather than easily swayed (and bought) legislators.<sup>52</sup> From the vantage of the utility industry, state regulation gave them a guaranteed customer base and locked in the existing industry structure in which the incumbent monopolies were dominant.<sup>53</sup> Judicial decisions which protected the utilities’ right to a reasonable return on their investment provided further reason for utilities to support this regulatory structure.<sup>54</sup>

Nonetheless, it was not impossible to imagine the regulatory compact meeting stiff political opposition. How the public perceived the compact depended, in large part, on how it was framed.<sup>55</sup> One could

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49. See Richard D. Cudahy & William D. Henderson, *From Insull to Enron: Corporate (Re)Regulation After the Rise and Fall of Two Energy Icons*, 26 ENERGY L.J. 35, 46 (2005) (“Insull argued that the entire industry had been held back by wasteful competition that ‘frightens the investor, and compels corporations to pay a very high price for capital.’ According to Insull, the best service at the lowest possible cost could only be obtained through a monopoly provider that had an exclusive geographic franchise.”) (footnote omitted).

50. Tomain, *supra* note 45, at 832.

51. HIRSH, *supra* note 45, at 26-27.

52. William Boyd, *Public Utility and the Low-Carbon Future*, 61 UCLA L. REV. 1614, 1640 (2014) (noting that these laws generally provided for wide regulatory mandates and independent management by area experts).

53. HIRSH, *supra* note 45, at 27-29; see also Boyd, *supra* note 52, at 1643 (noting that the rate and franchise guarantees also allowed utilities to favorably access capital markets necessary for investment in electricity infrastructure).

54. See, e.g., *Fed. Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (“The rate-making process . . . involves a balancing of the investor and the consumer interests. . . . From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business.”); *Smyth v. Ames*, 169 U.S. 466, 546 (1898) (holding, in the railroad context, “that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public”).

55. See Schraub, *Sticky Slopes*, *supra* note 9, at 1309 (“Framing theory . . . argues that social movements are not simply responding to pre-existing dynamics necessarily flowing from particular institutional or social arrangements. Rather, they are in the business of creating and manipulating what social facts mean in the context of their constituencies, their opponents, and the surrounding polity.”) (footnote omitted).

present the relationship as protecting industry and consumer alike from the debilitating effects of voracious, unrestrained competition. But one could also portray it as naked protectionism for entrenched robber barons who could easily capture the commissions that were supposedly “policing” them. The latter possibility was not theoretical and turned primarily on how the public perceived the relevant actors and their behavior. Insull had, as a cautionary tale, the case of Chicago street-car magnate Charles Yerkes. Yerkes had also attempted to convert his empire into a similar publicly regulated monopoly, but he was stymied due, in large part, to the fact that he was reviled by most of his customers.<sup>56</sup>

Insull was determined not to meet the same fate. He launched an expansive campaign to ensure that electricity consumers saw public utilities as allies rather than adversaries. This included a popular “consumer ownership” model which sold stock to electricity customers as well as aggressive promotion of the sale of electric appliances and gadgets for home use.<sup>57</sup> Placing electricity utilities under the ambit of state regulatory commissions was presented as part of a larger public framing in which the utilities and consumers were on the same side.

In short, while the monopoly model of electricity regulation could be explained in terms of self-interest (of the regulators and of the utilities), this does not alter the fact that this arrangement was not a foregone conclusion. It needed to be sold to the public, and the sale needed to successfully construct the creation of an electricity monopoly as in the best interest of industry and public alike. Insull’s campaigns “select[ed] some aspects of a perceived reality”—namely, those elements which drew together industry and consumer—“and ma[d]e them more salient” as a means of constructing the social understanding of Insull’s reform efforts.<sup>58</sup> And unlike Yerkes, Insull was quite successful: while his empire collapsed during the Great Depression, the regulatory compact model he forged endured for decades thereafter.

## 2. *PURPA and the Push Towards Deregulation*

The regulatory compact was based off a perceived unity of interests between the electricity industry and electricity consumers. Both favored significant expansion of the availability of plentiful and cheap electricity. Electricity utilities, of course, wanted to expand their customer base (and sell more power to them), and electricity consumers had bought into the notion that more power equaled a

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56. See Cudahy & Henderson, *supra* note 49, at 47-48.

57. See *id.* at 52-53.

58. Robert M. Entman, *Framing: Towards Clarification of a Fractured Paradigm*, 43 J. COMM. 51, 52 (1993).

greater quality of life. Technological innovation and increased electrification allowed for more electricity to be produced and consumed at lower prices.

This accord, successful through the middle of the twentieth century, began to be challenged in the 1960s and 1970s. The first challenge was a “plateau” in the electricity market which unsettled the assumptions that had provided for steady utility profits in the preceding decades.<sup>59</sup> As rates of consumption and technological innovation both stalled, utilities could no longer obtain the stable rates of return that they had previously enjoyed. This problem was exacerbated by perverse incentives created by the regulatory compact—because utilities were generally entitled to recover their “costs” (plus a reasonable profit), utilities were encouraged to overinvest in capital improvements, overbuilding supply and otherwise increasing prices.<sup>60</sup> While nominally the requirement that recovered costs be “prudently” incurred could have provided a check on overexpansion, functionally commissions were reluctant to second-guess business management decisions by regulated utilities.<sup>61</sup>

The burgeoning environmental movement also destabilized the perception of everyday consumers and electricity utilities as natural allies. Increased electricity production did not only mean cheaper prices and better gadgets; it also entailed greater pollution and significant environmental challenges.<sup>62</sup> Moreover, environmentally conscious consumers did not necessarily favor the (high-pollutions) *types* of energy resources utilized by the incumbent monopolies.<sup>63</sup> The emergent gap between consumer preferences and utility practices imperiled the incumbents’ historic political dominance in setting electricity policy.

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59. Joseph P. Tomain, *The Past and Future of Electricity Regulation*, 32 ENVTL. L. 435, 450 (2002) (“Starting roughly in 1965, the industry reached technological and financial plateaus at which industry expansion slowed considerably; economies of scale were not being realized, costs were increasing, generation was overbuilt, and alternative providers were coming into the market.”).

60. *See id.*

61. FERC has articulated a presumption of prudence which recognizes “that managers of a utility have broad discretion in conducting their business affairs and in incurring costs necessary to provide services to their customers.” *New England Power Co.*, 31 FERC ¶ 61,047, 61,084 (1985). The prudence test looks to whether the incurred costs are those which “a reasonable utility management . . . would have made, in good faith, under the same circumstances, and at the relevant point in time.” *Id.* Even if “in hindsight it may be clear that a management decision was wrong,” prudence is measured “based on the particular circumstances existing either at the time the challenged costs were actually incurred, or the time the utility became committed to incur those expenses.” *Id.*

62. *See Sine & Lee, supra* note 38, at 131 (noting the increase in attention environmental groups began to give to energy issues).

63. *See id.* at 126.

The key development in this story is the passage of the Public Utility Regulatory Policies Act (PURPA) in 1978.<sup>64</sup> Designed to increase efficiency and remedy certain defects in the electricity regulatory regime, PURPA contained a seemingly unassuming provision enabling certain “Qualifying Facilities” (QFs) to effectively enter the electricity marketplace by requiring electric utilities to purchase their power.<sup>65</sup> PURPA defined a QF as either a cogeneration facility (a facility which produces “steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating, or cooling purposes” alongside its electric energy production),<sup>66</sup> or “small power production facilit[ies]” producing no more than 80 megawatts of energy through the use of renewable or other environmentally friendly resources.<sup>67</sup> Specifically, FERC interpreted PURPA as requiring that utilities purchase power from QFs at their full-avoided cost—that is, the cost the utility would have paid had it generated the electricity itself (or purchased from another source).<sup>68</sup>

PURPA created an opportunity for small generators to compete so long as they could produce energy for less than the big utilities’ avoided cost rates. The old assumption was that this would be a rare occurrence—economies of scale would give big generators an insurmountable advantage in price. “What surprised everyone was how much new nonutility generated electricity was available and how eager independent power producers (IPPs) were to enter the market.”<sup>69</sup> As it turned out, QFs could consistently produce power below the avoided cost of the monopoly generators, and thus they produced as much electricity as PURPA allowed.<sup>70</sup>

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64. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended in scattered sections of 5, 15, 16, 26, 30, 42, and 43 U.S.C.).

65. 16 U.S.C. § 824a-3(a) (2012); see *FERC v. Mississippi*, 456 U.S. 742, 750 (1982) (observing that PURPA was passed in part because “traditional electricity utilities were reluctant to purchase power from, and to sell power to, the nontraditional facilities”); Richard D. Cudahy, *PURPA: The Intersection of Competition and Regulatory Policy*, 16 ENERGY L.J. 419, 422 (1995) (noting that without a government mandate utilities “were reluctant to purchase power from their potential competitors” and on the occasions they did so “the prices they offered were not attractive”).

66. 16 U.S.C. § 796(18)(A) (2012).

67. *Id.* at § 796(17)(A) (stating that a small power production facility must produce “electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof”).

68. See 18 C.F.R. § 292.304(b)(2) (2014); Cudahy, *supra* note 65, at 422 (“The price of PURPA power, as prescribed by statute and interpreted by regulation, was full-avoided cost, or the cost to a utility of generating the same energy or purchasing it from another source.”); see also *Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402 (1983) (upholding FERC’s full-avoided cost rates and interconnection requirements under PURPA).

69. Tomain, *supra* note 59, at 451-52.

70. *Id.* at 452.

From a social movement perspective, there are two critical lessons to be drawn from PURPA's success. The first is straightforward: new economic developments (the energy "plateau"), combined with a disruptive social movement (environmentalism), created a novel opportunity within a previously closed socio-economic institution (energy markets). In stark contrast to the old model, which envisioned high-capacity (and normally high-polluting) power generators that could only be built by large (and governmentally protected) utilities, PURPA was geared towards small-scale, sustainable generation. The second lesson is more subtle but perhaps more important: the relevant provision of PURPA was not, at the time, seen as a major reform. It was not perceived as the first step in a radical restructuring of the energy sector. PURPA's significance was that it created a foothold for new energy stakeholders—ones more attuned to the new problems and public understandings surrounding energy—to enter into the market.

The success of PURPA spurred a larger rethinking of the electricity market and the possibility of greater competition.<sup>71</sup> A seemingly unlikely alliance of consumer advocates like Ralph Nader and Chicago-school economists had already begun presenting deregulation as an exciting, even trendy, means of reinvigorating hidebound regulated industries.<sup>72</sup> Instead of viewing the regulatory compact as a public-spirited endeavor to ensure that all relevant electricity stakeholders were treated fairly, critics cast the monopoly as an example of regulatory capture.<sup>73</sup> FERC soon began exploring the possibility of "restructuring" the industry to further push it away from a pure monopoly model, and it rapidly "became probably the most consistent and important administrative agency in promoting the transition to" competitive, deregulated markets.<sup>74</sup>

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71. See *id.* at 453-54; HIRSH, *supra* note 45, at 119 ("Through its mostly unintended consequences, PURPA inaugurated the process by which the traditional structure of the utility system disintegrated.").

72. See, e.g., Mark Green & Ralph Nader, *Economic Regulation vs. Competition: Uncle Sam the Monopoly Man*, 82 YALE L.J. 871, 883-87 (1973); Symposium, 41 J. AIR L. & COM. 573 (1975) (symposium devoted to the possibility of deregulating the airline industry); Harry M. Trebing, *The Chicago School Versus Public Utility Regulation*, 10 J. ECON. ISSUES 97, 97-98 (1976). Cf. Sine & Lee, *supra* note 38, at 124 (noting the ability of social movements to "embed their values into the regulatory structure, creating supportive contexts for new types of entrepreneurial activity").

73. See GABRIEL KOLKO, *THE TRIUMPH OF CONSERVATISM: A REINTERPRETATION OF AMERICAN HISTORY, 1900-1916*, at 3 (1963) ("It is business control over politics (and by 'business' I mean the major economic interests) rather than political regulation of the economy that is the significant phenomenon of the Progressive Era."); Boyd, *supra* note 52, at 1652 (observing that, for Chicago-school economists, "[p]ublic utility regulation was . . . a product of rent-seeking behavior on the part of regulated firms; the idea of a general public interest was tenuous at best").

74. Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1367 (1998).

As William Boyd observes, the arguments against the utility's regulated-monopoly status were not unknown prior to the 1960s and 1970s, nor are they indisputably correct.<sup>75</sup> Their influence derives from the particular social position that had emerged at this time period, which allowed the utility monopoly to be reframed "as an example of the endemic problems afflicting government regulation and the concomitant superiority of markets."<sup>76</sup> This critique had the temporally specific advantage of being able to pit a hypothetical free market against all of the grubby day-to-day failings of the monopoly.<sup>77</sup> The pro-competition critique likely could not have gained traction if there were not some economic and experiential bases for it; but viewing the debate solely within those terms overlooks essential sociological differences between the progressive-era dawn of the electricity sector (a novel and fast moving industry in a society fearful of overpowered "robber barons") and that which existed by mid-century (a matured industry facing technological stagnation and significant environmental challenges).

### 3. *Retail Competition: Competitive versus Monopoly States*

PURPA's move toward competition did not on its own spark a similar restructuring across the electricity sector—at least not universally. Of the three main segments of the electricity market—generation, wholesale sales, and distribution—PURPA had effectively (if only partially) introduced competition into the first.<sup>78</sup> Outside the generation context, QFs had only limited access to the market—they could sell to utilities at avoided-cost rates, but they had no means of accessing interstate transmission lines or selling to the ultimate retail consumers. The natural next step was to deregulate the electricity transmission market. The Energy Policy Act of 1992 gave FERC general authority to order transmission companies to allow other power companies to move power across their lines (known as "wheeling").<sup>79</sup>

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75. See Boyd, *supra* note 52, at 1656-57.

76. *Id.* at 1656.

77. See *id.* at 1657 ("Of course, comparing an ideal view of markets to real-world regulation was never going to go in regulation's favor . . .").

78. The Energy Policy Act of 1992 further advanced generation deregulation by making it easier for non-QFs to access the market, albeit without the strong subsidies provided by PURPA. See Jeffrey D. Watkiss & Douglas W. Smith, *The Energy Policy Act of 1992—A Watershed for Competition in the Wholesale Power Market*, 10 YALE J. ON REG. 447, 467-74 (1993) (detailing the new category of "exempt wholesale generators" created by the Act). By 2001, non-utility generators accounted for 30% of all electricity generation. Tomain, *supra* note 59, at 469.

79. See Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (codified as amended in scattered sections of 16 and 42 U.S.C.); *Otter Tail Power Co. v. United States*, 410 U.S. 366, 368 (1973) (defining wheeling as the "transfer by direct transmission or displacement electric power from one utility to another over the facilities of an intermediate utility").

Whereas PURPA had permitted wheeling orders only where FERC “determines that such order would reasonably preserve existing competitive relationships,”<sup>80</sup> now FERC merely had to determine that such an order was “in the public interest” and complied with general requirements that the rates of service be “just and reasonable.”<sup>81</sup> In 1996, FERC published Order 888,<sup>82</sup> which required interstate transmission line operators to file a non-discriminatory tariff for use of their power lines. Further, the pricing and usage of the transmission lines had to be “unbundled” from other non-retail utility services, preventing self-dealing and other anti-competitive practices meant to favor the incumbent owners.<sup>83</sup> Order 888 functionally deregulated the wholesale market, and today FERC generally “regulates” wholesale electricity rates by ensuring “the integrity of the interstate energy markets,” rather than through direct ratemaking proceedings.<sup>84</sup> The last horizon for competition was sales to end-consumers, but FERC was still without jurisdiction to introduce competition into the retail sector.<sup>85</sup> The Federal Power Act continued to delegate responsibility over that segment of the electricity market to the states, and the Energy Policy Act of 1992 preserved state authority over retail wheeling.<sup>86</sup> This created new challenges for competition advocates, because thus far electricity restructuring had been promoted primarily at the federal level. At the state level the interest group dynamics surrounding electricity restructuring became especially prominent.<sup>87</sup>

Some of these dynamics are quite straightforward. For example, there are wide disparities in the average electricity rates paid by con-

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80. See Energy Policy Act § 721 (amending 16 U.S.C. § 824j).

81. 16 U.S.C. § 824j(a) (2012) (“[T]he Commission may issue such [a wheeling] order if it finds that such order meets the requirements of [16 U.S.C.] section 824k . . . and would otherwise be in the public interest.”); § 824k(a) (providing that wholesale transmission “rates, charges, terms, and conditions shall promote the economically efficient transmission and generation of electricity and shall be just and reasonable, and not unduly discriminatory or preferential”).

82. Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 61 Fed. Reg. 21,540 (May 10, 1996) (to be codified at 18 C.F.R. pts. 35, 385). See *New York v. FERC*, 535 U.S. 1 (2002) (upholding Order 888).

83. See *New York*, 535 U.S. at 11-12 (noting that Order 888 required the “functional unbundling” of wholesale generation and transmission services” as well as unbundling retail transmission services where the transmission occurred in interstate commerce).

84. *N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74, 81 (3d Cir. 2014).

85. See 16 U.S.C. § 824k(g)-(h) (2012) (prohibiting any FERC order “inconsistent with [state] retail marketing areas” or which provides for “mandatory retail wheeling” to consumers).

86. See HIRSH, *supra* note 45, at 244 (noting that under the Energy Policy Act “the federal government would not mandate retail wheeling, but states could”).

87. See David B. Spence, *The Politics of Electricity Restructuring: Theory vs. Practice*, 40 WAKE FOREST L. REV. 417, 423 (2005).

sumers across different states.<sup>88</sup> Where electricity rates are low, an “if it ain’t broke, don’t fix it” mentality may easily dominate the polity. Moreover, local investor-owned utilities also often oppose the curtailment of their monopolies, as this would disturb their “comfortable life with a virtually guaranteed reasonable rate-of-return on investment.”<sup>89</sup> But in addition to these concerns, state utility commissions had special reason to be suspicious of electricity restructuring—adopting it would effectively cede much of their regulatory power to the federal government.

To understand why, it is necessary to quickly outline the basic structure of federal versus state authority in the electricity context. The Federal Power Act of 1935<sup>90</sup> split the regulatory responsibility for electricity into three components: generation, transmission, and distribution.<sup>91</sup> States were responsible for regulating the actual generation of power.<sup>92</sup> The Federal Power Commission—now the Federal Energy Regulatory Commission (FERC)—was granted jurisdiction over the interstate transmission of power and wholesale power sales.<sup>93</sup> Finally, states retained jurisdiction over the local retail distribution of the power.<sup>94</sup> The result was a regulatory “sandwich,” with states having authority over the beginning and end of the electricity life cycle and FERC obtaining jurisdiction over the middle.

This framework quickly ran into a technical problem. Electricity travels by physics, not by contract. In 1945, the Supreme Court concluded that the line of federal jurisdiction “was to follow the flow of electric energy, an engineering and scientific, rather than a legalistic or governmental, test.”<sup>95</sup> But because electricity flows do not follow political (or contractual) borders, there is almost no way to determine

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88. See Severin Borenstein & James Bushnell, *Electricity Restructuring: Deregulation or Reregulation?*, 23 REG. 46, 47 (2000).

89. Amy W. Ando & Karen L. Palmer, *Getting on the Map: The Political Economy of State-Level Electricity Restructuring* 8 (Res. for the Future, Discussion Paper 98-19-REV, 1998).

90. Federal Power Act, Pub. L. No. 74-334, 49 Stat. 863 (1935) (codified at 16 U.S.C. § 791).

91. See Borenstein & Bushnell, *supra* note 88, at 46 (“Analysis of the electricity industry begins with the recognition that there are three rather distinct components of it: generation, transmission, and distribution.”).

92. 16 U.S.C. § 824(b)(1) (2012) (showing that with some exceptions, FERC “shall not have jurisdiction . . . over facilities used for the generation of electric energy”).

93. *Id.* (conferring jurisdiction over “the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce”); *see also id.* § 824(d) (defining “‘sale of electric energy at wholesale’” as “a sale of electric energy to any person for resale”).

94. *Id.* § 824(b)(1) (omitting FERC jurisdiction “over facilities used in local distribution or only for the transmission of electric energy in intrastate commerce, or over facilities for the transmission of electric energy consumed wholly by the transmitter”).

95. *Conn. Light & Power Co. v. Fed. Power Comm’n*, 324 U.S. 515, 529 (1945).

that a particular generator's electrons will power a particular consumer's home or business. Functionally, if there are any interstate connections on the grid, it is at least plausible that some power transactions will include the interstate transmission of power.<sup>96</sup> Hence, FERC's authority over wholesale electricity "in interstate commerce" functionally became authority over any sale of power for resale.

The upshot is that federal authority over electricity sales largely rises and falls on the scope of the wholesale (sale-for-resale) market.<sup>97</sup> In the context of vertically integrated monopolies, there were few such sales—the monopoly generated its own power, transmitted it across its own lines, and distributed it to its own consumers without any intermediate sales. The federal role is minimal, and state commission authority is at its apex. In a competitive market, by contrast, there will frequently be sales-for-resale (e.g., from an independent generator to a utility which ultimately delivers the power to a consumer), and federal authority correspondingly grows.<sup>98</sup>

The unique attributes of this federal structure, combined with the dominant political position of the local monopoly vis-à-vis the Commission, gave many state utility commissions ample incentive to oppose restructuring. On the one hand, incumbent utilities are by far the dominant constituency of state utility commissions; if they opposed introducing competition, the very fact of the monopoly would make it difficult for other voices to be heard.<sup>99</sup> And on the other hand, state utilities could fear restructuring simply for reasons of self-preservation: "Since PUCs [Public Utilities Commissions] are in the

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96. The Supreme Court's decision in *Fed. Power Comm'n v. Fla. Power & Light Co.*, 404 U.S. 453 (1972), is illustrative. Due to Florida's peninsular geography, the concentration of customers at the southern end of the state, and the risk of hurricanes disrupting the grid, Florida Power & Light was uniquely insulated from the remainder of the American power grid. *See id.* at 456. It had no direct connections to any other state electricity grids, though it did indirectly connect through several other Florida electric utilities. *See id.* at 456-57. Nonetheless, the Court held that commingling at these indirect connections was sufficient to support federal jurisdiction over the utility. *Id.* at 462-63.

97. The Federal Power Act also gives FERC jurisdiction over interstate transmission of electricity. *See New York v. FERC*, 535 U.S. 1, 6 (2002). Under a traditional monopoly model, though, this authority was largely restricted to concerns over reliability rather than pricing because transmission expenses were bundled into the overall cost of the electricity purchase and did not constitute a separate transaction. *See id.* at 21. In a competitive market where transmission is unbundled and charged separately from the actual provision of the power, FERC has jurisdiction over the price of the transmission aspect of the transaction, even at the retail level. *See id.*

98. *See infra* note 101 and accompanying text.

99. *See HIRSH, supra* note 45, at 45; *see also* Terry M. Moe, *The Politics of Bureaucratic Structure*, in *CAN THE GOVERNMENT GOVERN?* 267, 267 (John E. Chubb & Paul E. Peterson eds., 1989) (noting the strategy by reformers to create institutions which are flawed by design so as to stymie future attempts to undo the reforms).

business of regulating electric utilities, they might be reluctant to push for a change that would diminish their role.<sup>100</sup> Indeed, the practical structure of many competition programs could easily combine these concerns. Retail competition programs sometimes require that utilities divest their generation assets and instead participate in the wholesale market to acquire power. This both circumscribes the business model of the utility and deprives the state utility commission of significant regulatory authority (since it shifts much of the economic action to the interstate wholesale market, regulated by FERC).<sup>101</sup>

Despite these barriers, several states began moving towards retail competition in the mid-1990s. California launched a high-profile investigation into the feasibility of retail competition throughout the 1990s, prompting many states to follow suit.<sup>102</sup> New Hampshire became the first to pass a restructuring law in May 1996; California's law followed later that year.<sup>103</sup> As of 2010, over a dozen states (primarily but not exclusively in the Northeast) had allowed some form of retail competition within their borders.<sup>104</sup>

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100. HIRSH, *supra* note 45, at 55; *see also* Mayer N. Zald & Roberta Ash, *Social Movement Organizations: Growth, Decay and Change*, 44 SOC. FORCES 327, 327 (1966) (arguing that "participants in [social organization] structure have a stake in preserving the organization, regardless of its ability to attain goals").

101. *See* PPL EnergyPlus, LLC v. Nazarian, 753 F.3d 467, 473 (4th Cir. 2014) (noting that in Maryland, retail restructuring "divested utilities of their generation resources, effectively compelling Maryland energy firms to participate in the federal wholesale markets. . . . Maryland's decision to participate in the federal scheme and enjoy its benefits was necessarily accompanied by a relinquishment of the regulatory autonomy the state had formerly enjoyed with respect to traditional utility monopolies"); *see also* *New York*, 535 U.S. at 21 (upholding FERC's exercise of jurisdiction over the terms of unbundled retail electricity *transmission*).

To be sure, not every state which underwent retail restructuring required incumbents to divest their generation assets. *See* Walter R. Hall II et al., *History, Objectives, and Mechanics of Competitive Electricity Markets*, in CAPTURING THE POWER OF ELECTRIC RESTRUCTURING 1, 29 (Joey Lee Miranda ed., 2009) ("Several states mandated or encouraged the former utility to fully or partially divest its generation and certain companies chose to divest voluntarily, but most states and former integrated suppliers have not taken this course and thus an integrated but functionally unbundled supplier remains in most markets."). Even so, it is evident that in a competitive environment it is *more likely* that there will be sales-for-resale at some point in the process between the electricity's generation and ultimate consumption.

102. *See* HIRSH, *supra* note 45, at 248-54 (describing the CPUC's "yellow book" and "blue book" reports on retail electricity restructuring).

103. *Id.* at 259-60.

104. *See* *Status of Electricity Restructuring by State*, *supra* note 2. The precise number of states with retail competition varies depending on how one counts states which have only partially implemented retail competition or have suspended prior programs. Oregon, for instance, allows competition for larger commercial and industrial consumers but not residential customers. *See* OR. PUB. UTIL. COMM'N, EVALUATION OF A COMPETITIVE POWER MARKET FOR RESIDENTIAL CONSUMERS 1 (2002), *available at* <http://www.puc.state.or.us/meetings/pmemos/2002/120302/reg4att.pdf>.

But the move to competition stalled out with the 2000 California energy crisis and Enron's subsequent collapse.<sup>105</sup> States which had previously been contemplating restructuring—even some which had taken significant steps in that direction—retreated due to concerns about market volatility.<sup>106</sup> In West Virginia, for example, the state held a proceeding to consider restructuring in the late 1990s, and in 2000 the Public Service Commission recommended electricity restructuring.<sup>107</sup> The West Virginia Legislature provided initial approval for this plan in March of 2000 but reserved full implementation pending certain tax statute modifications.<sup>108</sup> When Enron imploded, the Legislature “opted not to modify the tax statutes upon which [the] full implementation of the Restructuring Plan rested. With the Restructuring Plan in a permanent state of limbo,” the Commission abandoned restructuring in 2002.<sup>109</sup>

Of course, Enron is not the only reason why retail electric competition lost its momentum—it is one high profile example of failings associated with the general bumps in overhauling a major American business sector.<sup>110</sup> And each state has a unique cocktail of policy considerations and industry circumstances which go into (or should go into) the decision as to whether to restructure. Nonetheless, it is fair to describe the California energy crisis and Enron's subsequent collapse as a “critical event” in the public understanding of energy restructuring.<sup>111</sup> Both Enron and California were central players in the public's understanding of free energy markets; their failures con-

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105. See Richard D. Cudahy, *Whither Deregulation: A Look at the Portents*, 58 N.Y.U. ANN. SURV. AM. L. 155, 180 (2001) (noting that California terminated its “dalliance” with retail competition only a few months before Enron declared bankruptcy in 2001); Richard J. Pierce, Jr., *Completing the Process of Restructuring the Electricity Market*, 40 WAKE FOREST L. REV. 451, 479 (2005) (“[T]he ‘just say no’ [to restructuring] group recognized that the California debacle and the Enron scandal provided them an unprecedented opportunity to . . . halt the restructuring process.”).

106. See Boyd, *supra* note 52, at 1668 (“Whereas in the years preceding the crisis roughly half of the states had initiated restructuring, by the mid-2000s, in the wake of the California crisis, many of these states had suspended or abandoned their efforts.”).

107. Allegheny Power, No. 05-0402-E-CN & 05-0750-E-PC, 2006 W. Va. PUC LEXIS 1129, at \*8 (W. Va. P.U.C. Apr. 7, 2006), available at <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=185663>.

108. *Id.* at \*8-9.

109. *Id.* at \*9.

110. See Joel B. Eisen, *The Environmental Responsibility of the Regionalizing Electric Utility Industry*, 15 DUKE ENVTL. L. & POL'Y F. 295, 295-96 (2005) (“In my view and those of numerous others, progress toward wholesale and retail markets (restructuring) has slowed through poor design of the regulatory and technical infrastructure and the combination of California, Enron, the uncertain future of FERC's Standard Market Design (SMD) and Wholesale Power Market Platform (WPMP) proposals, states grappling with ‘stranded costs’ and other transition issues, and complex problems of market structure and operation.”) (footnotes omitted).

111. See Meyer & Staggenborg, *supra* note 8, at 1638 (explaining the concept of “critical events” as part of social movement practice).

structed energy competition as unstable, unpredictable, and dangerous. Restructuring had sold itself on “the promise that ‘rates would go down,’” and when presented with a high-profile case of exorbitant, skyrocketing prices, consumers understandably grew mistrustful of the enterprise.<sup>112</sup> Opponents of restructuring certainly helped press the issue, using these crises as proof positive that restructuring was inherently flawed and that competitive electricity markets would always remain dysfunctional.<sup>113</sup> While restructuring proponents contended that Enron was a case of illegal market manipulation rather than a failure of competition as a concept, they were unable to gain much traction.<sup>114</sup>

Whether or not it was fair to foist the sins of Enron onto the broader restructuring debate is beside the point. Today the state of retail competition has been characterized as “moribund.”<sup>115</sup> Though most of the states that initially restructured have not reverted to a traditional monopoly model, the spread of retail choice has been largely stymied.<sup>116</sup>

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The preceding Section provided an abbreviated account of the rise, fall, and partial recovery of the regulated-monopoly model of electricity production and distribution. It is not intended to be the full story, nor is it intended to assert that social movement factors were the only factor driving the relevant changes. Rather, the social movement account emphasizes certain features of the debate that are often unappreciated in explaining how regulatory structures change.

The successful implementation of the monopoly model relied significantly on the construction of a social understanding of the electricity sector as in accord with its consumers, with both parties enjoying a symbiotic relationship predicated on the expansion of cheap and plentiful power. This generally harmonious relationship persisted until the 1970s, when new developments created fissures. Some of these developments (e.g., technological and demand plateaus) were largely endogenous to the electricity market, but others (e.g., the rise of the environmental movement and the growing trendiness of de-

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112. See Spence, *supra* note 87, at 426-27, 446-47.

113. *Id.* at 417 (noting those who “see the California experience as proof that electricity is a unique commodity ill suited to market-based pricing”).

114. See *id.* at 472, 477 (noting the “seemingly never-ending debate between those who attributed the [California price] spike to market manipulation by firms like Enron and those who attributed it instead to flaws in the design of the market” but that ultimately “members of Congress . . . urged FERC to abandon its efforts to restructure the market”).

115. Lincoln L. Davies, *Power Forward: The Argument for a National RPS*, 42 CONN. L. REV. 1339, 1353 (2010).

116. See David B. Spence, *The Political Barriers to a National RPS*, 42 CONN. L. REV. 1451, 1455 & n.8 (2010).

regulation) emerged from the outside. These forces allowed even inconspicuous changes to federal utility regulation to have large and unexpected effects on the industry writ large. They also altered how certain important stakeholders (most notably, FERC) perceived deregulation as both a technical possibility and an ideological good.

This shift caused the deregulation movement to make considerable strides through the 1990s, when the California energy crisis and Enron's collapse stalled their momentum. These critical events provided needed ammunition for opponents of restructuring to change how the enterprise was framed in the public mind. Instead of a forward-thinking means for invigorating a moribund industry, energy competition was reconstructed as dangerous and unreliable.

### III. RENEWABLE ENERGY CREDITS

#### Renewable Energy Credits

are a joint product of generation and are separate from the actual kWh of energy produced. They are measured in energy units such as kWh and can be used to meet an electricity retailer's portfolio requirements in lieu of acquiring and selling at retail actual kWh generated from eligible renewable resources.<sup>117</sup>

A Renewable Energy Credit typically represents a certain amount of clean energy placed onto the grid.<sup>118</sup> Because RECs and actual produced energy are distinct entities, they may be unbundled and sold separately from one another.<sup>119</sup> Once a REC is "used"—either to meet legal clean energy portfolio requirements<sup>120</sup> or to offset dirty energy usage by end-use consumers<sup>121</sup>—it is generally retired and cannot be reused.<sup>122</sup>

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117. David Berry, *The Market for Tradable Renewable Energy Credits*, 42 *ECOLOGICAL ECON.* 369, 370 (2002).

118. See, e.g., N.C. GEN. STAT. § 62-133.8(a)(6) (2014) (defining a REC as "a tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility, new renewable energy facility, or reduced by implementation of an energy efficiency measure that is used to track and verify compliance with the requirements of this section as determined by the Commission").

119. Gillenwater, *supra* note 6, at 2109 ("RECs are unbundled environmental commodity, and therefore may be sold separately, from the underlying electricity generated.").

120. See *infra* Part II.A.1.

121. See *infra* Part II.A.2.

122. See *infra* note 144 and accompanying text (noting the widespread rule against double-counting RECs and the minority of states which permit the same REC to be used for multiple purposes).

Renewable Energy Credits are traded in two primary markets.<sup>123</sup> The first is the “compliance” market. Many states require utilities to source a specified percentage of their energy from renewable providers, and the purchase of RECs is one way utilities can meet these statutory mandates. This marketplace is extensively regulated and has been the subject of significant discussion in the literature. However, RECs can also be bought and sold on the “voluntary” market. Even absent any legal requirement, some consumers may be willing to pay a premium for clean energy.<sup>124</sup> While it is virtually impossible to discern whether the individual electrons that reach a particular consumer are “clean” or “dirty,” RECs are a way of verifying that clean energy equivalent to the consumer’s usage has been placed into the pool of electricity.

Unlike the compliance market, the voluntary market is subject to comparatively little regulation. Indeed, as will be discussed below, the voluntary market rests in a somewhat unique position within the broader sphere of electricity regulation.<sup>125</sup> While addressing the compliance market as a point of comparison, this Section will focus on the comparatively underexamined voluntary market and how it fits into the joint federal-state energy regulatory structure.

### A. *Two REC Markets*

#### 1. *The Compliance Market.*

Many states have imposed Renewable Portfolio Standards (RPS), which require state utilities to obtain a specified percentage of the electricity they sell from renewable sources.<sup>126</sup> One way to meet these requirements, of course, is for the utility to invest in its own renewable generation facilities.<sup>127</sup> Typically, though not always, states permit utilities to purchase RECs to meet these requirements in lieu of actually buying “clean” electricity themselves.<sup>128</sup> This option may

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123. See Crandall, *supra* note 6, at 896 (observing that RECs are “capable of being purchased by consumers or applied to state energy portfolio requirements separately from electricity”).

124. See *id.* at 906 (noting the “bragging rights” that may attach to such purchases).

125. See *infra* Part II.B.

126. NANCY RADER & SCOTT HEMPLING, *THE RENEWABLES PORTFOLIO STANDARD: A PRACTICAL GUIDE 1* (2001), available at <http://www.naruc.org/Publications/rps.pdf> (noting that RPS requires that retail electricity sellers source “a certain amount of electricity from renewable energy resources, such as wind, solar, geothermal, hydro, and various forms of biomass and ocean energy”).

127. Felix Mormann, *Enhancing the Investor Appeal of Renewable Energy*, 42 ENVTL. L. 681, 692 (2012) (“[U]tilities that are subject to RPSs can invest in their own renewable energy power generation facilities to earn RECs for the electricity they produce.”).

128. Delmas & Montes-Sancho, *supra* note 4, at 2274 (“The majority of states give their electric utility providers the option of generating electricity from renewable resources

make sense if, for example, the utility's normal energy sources are insufficient to satisfy clean energy demand or the generators which can most efficiently produce renewable energy cannot cheaply transmit the actual wattage to consumers.<sup>129</sup> Because these REC sales are made to satisfy state mandates, trading of this sort is known as the REC "compliance" market.

The vast majority of writing on RECs focuses on their usefulness for RPS compliance.<sup>130</sup> RPS rules have been promoted as critical measures to encourage the development of renewable generation sources and to decrease the proportion of electricity sales which stem from coal and other "dirty" resources. But RPS requirements are regulatory mandates imposed upon utilities, and so they are subject to the same criticisms that can be leveled at any similar legal imposition. RECs, for their part, provide enhanced flexibility for utilities charged with meeting RPS requirements, but "acquiring tradable credits without generating the corresponding kWh locally does not provide visible renewable energy generation resources for a community and thus might not be acceptable to energy consumers, especially those who would be willing to pay a premium for 'green energy.'" <sup>131</sup>

RPS are creations of state law, and states have considerable latitude in determining the structure of REC trading, the types of energy sources which "qualify" as renewable and thus can create RECs, and other elements of the regulatory program.<sup>132</sup> The preeminence of state authority over the field has led to two primary problems. First, states have naturally desired that RPS programs lead to enhanced renewable resources in the vicinity of the state itself—it does Georgia little good if its RPS subsidizes increased renewable generation in Iowa.<sup>133</sup> State efforts to favor the purchase of locally produced clean

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themselves, and/or exchanging renewable energy credits (RECs) or renewable energy certificates, in order to meet RPS mandates."); see Alexandra B. Klass & Elizabeth J. Wilson, *Interstate Transmission Challenges for Renewable Energy: A Federalism Mismatch*, 65 VAND. L. REV. 1801, 1810 & n.36 (2012) (listing the states where REC trading is permitted, limited, or prohibited as a means of meeting RPS requirements).

129. See Berry, *supra* note 117, at 371.

130. See, e.g., Joshua P. Fershee, *Changing Resources, Changing Market: The Impact of a National Renewable Portfolio Standard on the U.S. Energy Industry*, 29 ENERGY L.J. 49 (2008); Benjamin K. Sovacool & Christopher Cooper, *The Hidden Costs of State Renewable Portfolio Standards (RPS)*, 15 BUFF. ENVTL. L.J. 1 (2007); Anne Havemann, Comment, *Surviving the Commerce Clause: How Maryland Can Square Its Renewable Energy Laws with the Federal Constitution*, 71 MD. L. REV. 848 (2012).

131. Berry, *supra* note 117, at 371.

132. See Am. Ref-Fuel Co., 105 FERC ¶ 61,004, 61,007 (2003) (concluding that because RPS rules are creations of state law, it is up to state utility commissions to determine whether generators or utilities own the RECs associated with power purchased under PURPA).

133. See Kirsten H. Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 ECOLOGY L.Q. 243, 268-78 (1999).

energy (or RECs derived from such local sources) raise significant dormant commerce clause issues.<sup>134</sup> Second, because states can and do have different definitions for what qualifies as a renewable resource, there are barriers to the interstate trade of RECs—a REC which may validly apply against RPS requirements in Utah may not do so in Colorado. This raises commerce clause issues of its own; it has also prompted some commentators to press for a national RPS standard.<sup>135</sup>

## 2. *The Voluntary Market*

The compliance market derives its force from state-imposed legal requirements that give value to renewably generated electricity. Even where there is no legal duty to act, however, some consumers may wish to purchase green power on their own initiative. These “voluntary” purchases of green energy are a rapidly increasing proportion of renewable electricity sales.<sup>136</sup>

One important area of distinction between the compliance and voluntary markets is the primary purchaser of the RECs. The compliance market is dominated by utilities, because RPS mandates are placed upon electricity retailers, not electricity consumers. Hence, utilities purchase RECs from renewable energy generators or brokers—either bundled or unbundled from the electric power itself. The consumers are not involved and, unless the utilities are permitted to pass their potentially higher costs onward, may not even be affected.<sup>137</sup> Along this axis, compliance REC trading is not materially different from the electricity market norm.

In the voluntary market, by contrast, the consumers are usually the purchasers of the RECs. This places them in a relatively unique position of having the ability to interact and deal directly with power producers, or independent REC brokers, regardless of the regulated

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134. See, e.g., Steven Ferrey, *Threading the Constitutional Needle with Care: The Commerce Clause Threat to the New Infrastructure of Renewable Power*, 7 TEX. J. OIL GAS & ENERGY L. 59 (2011); Daniel K. Lee & Timothy P. Duane, *Putting the Dormant Commerce Clause Back to Sleep: Adapting the Doctrine to Support State Renewable Portfolio Standards*, 43 ENVTL. L. 295 (2013); Nathan E. Endrud, Note, *State Renewable Portfolio Standards: Their Continued Validity and Relevance in Light of the Dormant Commerce Clause, the Supremacy Clause, and Possible Federal Legislation*, 45 HARV. J. ON LEGIS. 259 (2008); Havemann, *supra* note 130. *But see* Engel, *supra* note 133, at 250 (arguing that state preferences for locally produced renewable energy should pass muster under the Dormant Commerce Clause).

135. See, e.g., Davies, *supra* note 115, at 1341-44 (noting that more than 25 proposals for a national RPS have been introduced in Congress).

136. See *supra* note 3.

137. See *N.M. Indus. Energy Consumers v. N.M. Pub. Regulation Comm'n*, 168 P.3d 105, 110 (N.M. 2007) (addressing a utility's right to automatically recoup costs associated with buying RECs in order to comply with a state RPS program).

or deregulated structure of their state retail market. RECs are distinct in that they are an electricity “product” that is not tied to the flow of electrons and thus can be bought and sold outside the electricity grid system.<sup>138</sup> REC sales thus bypass the natural monopoly and offer opportunities for buyers to interact with a multitude of potential sellers even where electricity markets are not otherwise open for competition.

Voluntary REC purchases come in three main varieties. In states with electricity competition, consumers often may simply choose to buy their electricity from companies that produce some or all of their electricity from renewable sources.<sup>139</sup> Even in monopoly states, though, some states and utilities are offering “green pricing” plans, wherein the utility offers consumers the option to pay a premium for green power.<sup>140</sup> Like in the compliance market, the utility then typically has a choice regarding whether it will directly source green energy or instead purchase an equivalent amount of RECs to cover the consumer’s energy usage.<sup>141</sup> Finally, there is an “unbundled” REC market where consumers can purchase just the RECs without acquiring any corresponding electricity voltage.<sup>142</sup>

Because the voluntary market is decoupled from specific state mandates, regulation of RECs trading on the voluntary market is relatively minimal. In North Carolina, for instance, even the *definition* of a REC is restricted to those sold for purposes of complying with the state’s RPS requirements.<sup>143</sup> Indeed, the only regulation North Carolina has put forward with respect to voluntary REC sales is a requirement that a single REC not be “double-counted” for both voluntary and compliance purposes.<sup>144</sup> Michigan likewise appears to

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138. Cf. Ferrey, *supra* note 134, at 63-64 (noting that RECs “are not subject to geographic or physical limitation”).

139. HEETER ET AL., *supra* note 3, at 1.

140. *See id.*

141. Delmas & Montes-Sancho, *supra* note 4, at 2274.

142. HEETER ET AL., *supra* note 3, at 1.

143. N.C. GEN. STAT. § 62-133.8(a)(6) (2014) (defining a REC as “a tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility, new renewable energy facility, or reduced by implementation of an energy efficiency measure that is used to track and verify compliance with the requirements of this section as determined by the Commission”) (emphasis added); 4 N.C. ADMIN. CODE 11 R08-66(b) (2014) (requiring the registration of any renewable energy facility (inside and outside of North Carolina) which “intends for renewable energy certificates it earns to be eligible for use by an electric power supplier to comply with [RPS requirements]”) (emphasis added); *see also* MICH. COMP. LAWS. § 460.1041(2) (2014) (“An electric provider is responsible for demonstrating that a renewable energy credit used to comply with a renewable energy credit standard is derived from a renewable energy source and that the electric provider has not previously used or traded, sold, or otherwise transferred the renewable energy credit.”) (emphasis added).

144. 4 N.C. ADMIN. CODE 11 R08-66(b)(4) (2014). This rule against double-counting is common amongst state REC regulations and is generally accepted by REC market

consider RECs to solely be a feature of the compliance market—it states that a “renewable energy credit shall not be granted for renewable energy the renewable attributes of which are used by an electric provider in a commission-approved voluntary renewable energy program.”<sup>145</sup> The absence of consistent definitions poses particular problems in the voluntary market, however, as the relatively abstract nature of what a REC represents poses the potential for considerable consumer confusion and abuse.<sup>146</sup>

At its broadest, a REC is a “green jewel box” which encompasses all positive environmental attributes of a given form of electricity production.<sup>147</sup> But defining RECs broadly creates considerable ambiguity regarding what RECs actually represent and whether they actually transfer a property right to specific emissions reductions.<sup>148</sup> It is of course very difficult to “dynamically score” the total environmental impact of any particular generation project. The more RECs are said to represent, the harder these claims are to verify and the further they begin to stray from a quantifiable good that represents a particular tradable attribute. Moreover, as the qualities of a “REC” grow more abstract and less amenable to standardization, their usefulness as a tradable instrument diminishes. As Michael Gillenwater puts it:

Environmental markets that operate with a clearly defined commodity are more likely to have low transaction costs and produce public good benefits. Environmental commodities that lack clear definitions will have higher transaction costs. And when traded in

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participants. *See, e.g.*, MONT. CODE ANN. § 69-3-2004(7)(c) (2014) (“Renewable energy credits sold through a voluntary service . . . may not be applied against a public utility’s or competitive electricity supplier’s obligation to meet the [renewable portfolio] standards.”); CAL. ENERGY COMM’N, RENEWABLES PORTFOLIO STANDARD ELIGIBILITY 86 (7th ed. 2013) (“A REC shall be counted only once for compliance with the California [Renewables Portfolio Standard] and may not be used to count toward the regulatory requirements of any other state or to satisfy any other retail regulatory or voluntary market product claims.”). Letter from Lawrence Silverstein, Senior Vice President & Managing Dir., NextEra Energy Power Mktg., LLC, to NEPOOL REC Sellers (May 15, 2014), available at <http://s3.documentcloud.org/documents/1164899/vtspeedltrtonepoolrecsellers4-15-14.pdf> (“It is a fundamental principle of all renewable energy market sales that the environmental characteristics associated with the electric energy generated cannot be counted or claimed twice.”). It is not, however, universal. *See* Bird & Lokey, *supra* note 3, at 21 (noting that Arizona, Vermont, and Wisconsin allow voluntary purchases to count towards meeting RPS requirements and that several other states are silent on the subject).

145. MICH. COMP. LAWS. § 460.1039(1)(c) (2014).

146. *See* Crandall, *supra* note 6, at 947 (arguing that a uniform definition of a REC “gives consumers more fluency in the market, allowing them to better choose between competing options. This is uniquely imperative with environmental products, where significant information asymmetries exist because of difficult-to-verify attributes, and where health and safety command special attention”).

147. *See* Jaap Jansen, *A Green Jewel Box?*, ENVTL. FIN., March 2003, at 27, 27.

148. *See* Gillenwater, *supra* note 6, at 2112.

separate markets, poorly defined commodities will more easily come into conflict and cause confusion among market participants.<sup>149</sup>

RECs can also be given a narrow scope to refer only to the fact that “(i) the underlying specific quantity of renewables-based electricity has been produced under the conditions specified by the standard information on the certificate and (ii) that the certificate has not yet been used for another application.”<sup>150</sup> “Used” must be interpreted broadly so as to not exploit consumer ignorance over renewable power transactions. The arrangement described in *SZ Enterprises LLC v. Iowa Utilities Board* provides a striking example.<sup>151</sup> There, a solar energy company contracted with Dubuque, Iowa to construct a solar facility which would “provide the city with renewable energy.”<sup>152</sup> The city would purchase the entire output of the solar facility, but the solar company would retain ownership of the RECs (with the stated intention that they would sell them to other parties).<sup>153</sup> The problem with this proposal is that once the RECs are sold, it is misleading to say that Dubuque is being provided with renewable energy.<sup>154</sup> Though the RECs have not been “used” by Dubuque in a formal sense—they were apparently not retired or used to satisfy RPS requirements—by representing to the city and its citizens that it was providing them with renewable energy, Dubuque functionally used its renewable attributes, and the solar company should not have been allowed to reuse them for sale to other parties.

### B. The Structure of REC Regulation

Despite encompassing a large portion of the overall REC marketplace, there is virtually no case law or regulation discussing issues specific to voluntary REC transactions. As of the writing of this Article, no case has addressed matters related to voluntary REC transactions specifically, and only a scattered few have addressed general issues related to REC transactions outside the compliance market context.<sup>155</sup> This is a troubling omission, because the unique attributes

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149. Michael Gillenwater, *Redefining RECs—Part 2: Untangling Certificates and Emission Markets*, 36 ENERGY POL’Y 2120, 2120 (2008).

150. Jansen, *supra* note 147, at 27.

151. 850 N.W.2d 441 (Iowa 2014).

152. *Id.* at 444.

153. *See id.* at 444-45 (noting that the city would get one-third of any revenues associated with REC sales).

154. *See* 16 C.F.R. § 260.15(d) (2014) (“If a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy.”).

155. The closest examples are decisions regarding which entity—generator or purchasing utility—owns RECs generated under PURPA contracts. *See, e.g.*, Wheelabrator

of the REC market make it difficult to locate inside our system of electricity federalism.

The division of authority between the federal government and the states in the electricity context, formalized in the Federal Power Act,<sup>156</sup> initially grew out of the Supreme Court's 1927 decision in *Public Utilities Commission of Rhode Island v. Attleboro Steam & Electricity*.<sup>157</sup> Attleboro Steam & Electricity, a Massachusetts company, contracted to buy electricity produced by a Rhode Island generator.<sup>158</sup> The Rhode Island Public Utilities Commission attempted to assert authority to regulate the rates of the contract.<sup>159</sup> The Supreme Court concluded, however, that this would place a "direct burden upon interstate commerce" in violation of the Dormant Commerce Clause.<sup>160</sup> The Court specifically held that neither Rhode Island nor Massachusetts could regulate the transaction, but rather "if such regulation is required it can only be attained by the exercise of the power vested in Congress."<sup>161</sup> Since Congress had to this point not enacted any comprehensive statutes enabling electricity regulation,<sup>162</sup> the Federal Power Act was passed in attempt to bridge the "*Attleboro* gap."

Despite considerable churn in the development and regulation of the electricity industry, the Federal Power Act's division of state and national responsibility has proved remarkably durable. The entire structure, however, is based on the nature of how power is *physically* delivered from generator to consumer. RECs, which are an "electricity" product entirely divorced from the actual physical channels of power distribution, do not have a clear place inside this framework. This makes the scope of state and federal authority over them quite unclear. Since they are primarily associated with either state-created RPS programs or end-user (retail) purchases, the federal government has displayed limited interest in regulating RECs from an *electricity* perspective (though the FTC has taken some steps to regulate them

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Lisbon, Inc. v. Conn. Dep't of Pub. Util. Control, 531 F.3d 183, 186 (2d Cir. 2008); Morgantown Energy Assocs. v. Pub. Serv. Comm'n, No. 2:12-cv-6327, 2013 U.S. Dist. LEXIS 140220, at \*2 (S.D. W. Va. Sept. 30, 2013); ARIPPA v. Pa. Pub. Util. Comm'n, 966 A.2d 1204, 1212-13 (Pa. Commw. Ct. 2009). FERC has decided that this question is not governed by PURPA but is one of state law. See Am. Ref-Fuel Co., 105 FERC ¶ 61,004 (2003).

156. See *supra* notes 90-94 and accompanying text.

157. 273 U.S. 83 (1927).

158. *Id.* at 84.

159. See *id.* at 84-86.

160. *Id.* at 89-90.

161. *Id.* at 90.

162. The first federal statute dealing with electricity regulation, the Federal Water Power Act, was passed in 1920 but had a relatively narrow scope focusing on hydroelectric power. The law was superseded by the Federal Power Act. See Sharon Jacobs, *Bypassing Federalism and the Administrative Law of Negawatts*, 100 IOWA L. REV. 885, 892 (2015).

from a *consumer protection* standard). However, shorn from the Federal Power Act's delineation of regulatory responsibility, state regulation of voluntary RECs may run into significant dormant commerce clause problems. This lacuna may insulate voluntary REC sales from protectionist state utility commissions, making them an ideal point of entry for electricity market participants who seek to get a "foot in the door" in otherwise closed marketplaces.<sup>163</sup>

### 1. *The Federal Role*

As Jim Rossi and Thomas Hutton observe, energy and environmental law have historically diverged in the degree of national uniformity typically demanded by the relevant statutory schema.<sup>164</sup> In the environmental context, federal law typically sets a "floor" which all states must meet but then permits individual states to impose more stringent requirements or other policy innovations that exceed the national standard.<sup>165</sup> By contrast, in the electric power context, "industry enjoys a national standard and need not tailor its activities to suit numerous regulators across smaller or more regional markets."<sup>166</sup> This is not entirely true, obviously, as individual states are vested with the authority to regulate the retail distribution of power and their decisions regarding how to structure the retail market vary considerably.<sup>167</sup> Rather, their core observation is that where Congress has crafted federal regulations regarding electric power, it is assumed that those regulations are meant to unify the entire field of regulation on that subject.<sup>168</sup>

Clean energy programs lie at the interstices of these two fields. And REC sales present a particularly unique problem. There is currently little basis in federal law to regulate RECs at all (excepting generally applicable consumer protection standards).<sup>169</sup> Despite the interstate character of the market, FERC only has a limited role in regulating RECs. Recall that the Federal Power Act gives FERC authority to regulate "the transmission of electric energy in interstate commerce" and "the sale of electric energy at wholesale in interstate commerce."<sup>170</sup> REC sales are neither, at least where the RECs are

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163. See *infra* Part III.

164. See Jim Rossi & Thomas Hutton, *Federal Preemption and Clean Energy Floors*, 91 N.C.L. REV. 1283 (2013).

165. See *id.* at 1289-90.

166. *Id.* at 1291.

167. See *supra* Part I.B.

168. See Rossi & Hutton, *supra* note 164, at 1303-04.

169. See Guides for the Use of Environmental Marketing Claims, 16 C.F.R. pt. 260 (2014). Another exception is where the RECs are bundled with wholesale power transactions. See *infra* notes 173-74 and accompanying text.

170. 16 U.S.C. § 824(b)(1) (2014).

unbundled from the sale of electric energy.<sup>171</sup> Nor were REC sales necessarily contemplated as part of the transactions regulated by PURPA. In 2003, FERC explicitly held that the contracts it approved for electricity purchases from Qualifying Facilities (QFs) did not address, one way or another, who held title to RECs and that such decisions were a matter of state law.<sup>172</sup> FERC confirmed this judgment in 2012, stating that “a REC does not constitute the transmission of electric energy in interstate commerce or the sale of electric energy at wholesale in interstate commerce. Therefore, RECs and contracts for the sale of RECs are not themselves jurisdictional facilities subject to the Commission’s jurisdiction under” the Federal Power Act.<sup>173</sup> The sole exception was if the RECs were bundled with the sale of electric power. In such circumstances, the Commission held that REC sales could affect the rates of the interstate power transaction and thus fell under the Commission’s authority.<sup>174</sup>

Beyond FERC, it is likely that the FTC could exercise limited authority to regulate voluntary REC sales to the extent that there is a “widespread pattern of unfair or deceptive acts or practices.”<sup>175</sup> FTC regulations could curb some of the more flagrant labeling problems associated with RECs, enhancing the transparency of REC sales.<sup>176</sup> For example, several environmentalists recently petitioned the FTC to investigate a Vermont power company which reportedly was marketing power sold to consumers as “renewable” while selling the associated RECs to New England utilities for RPS compliance purposes.<sup>177</sup> The petition remains under review; interestingly, the power company has argued that it is not subject to FTC jurisdiction at all because Vermont’s status as a monopoly state necessarily means the company is not “marketing” its products to consumers (who lack the ability to choose an alternative provider).<sup>178</sup>

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171. See *WSPP Inc.*, 139 FERC ¶ 61,061 (2012) (concluding that unbundled REC sales are outside of FERC’s jurisdiction but that REC sales bundled with electric energy are FERC jurisdictional).

172. *Am. Ref-Fuel Co.*, 105 FERC ¶ 61,004 (2003).

173. *WSPP Inc.*, 139 FERC ¶ 61,061 (2012).

174. *Id.*

175. See 15 U.S.C. § 57a(b)(3)(B) (2014).

176. See *Crandall*, *supra* note 6, at 947-50 (articulating potential bases for FTC authority).

177. Petition to Investigate Deceptive Trade Practices of Green Mountain Power Co. in the Marketing of Renewable Energy to Vermont Consumers at 1 (Sept. 15, 2014), available at [https://www.ftc.gov/system/files/documents/public\\_statements/624571/140915gmpvermontlawpetition.pdf](https://www.ftc.gov/system/files/documents/public_statements/624571/140915gmpvermontlawpetition.pdf).

178. *Id.* at 18-19 (quoting Letter from Douglas Smith, Dir. of Power Supply, Green Mountain Power Co., to Susan Hudson, Clerk, Vt. Pub. Serv. Bd. (Dec. 20, 2012)), available at [https://www.ftc.gov/system/files/documents/public\\_statements/624571/140915gmpvermontlawpetition.pdf](https://www.ftc.gov/system/files/documents/public_statements/624571/140915gmpvermontlawpetition.pdf).

It seems unlikely that the FTC will agree that it lacks jurisdiction over allegedly misleading claims by monopoly electricity providers to their customers. But regardless, the FTC neither has the institutional capacity nor (in all likelihood) the desire to issue regulations designed to affect the substantive nature of the retail or wholesale electricity market.<sup>179</sup> To the extent that it chooses to intervene in REC markets, it is likely to do so in an extremely narrow fashion focusing on deceptive or misleading claims, rather than engaging in wholesale regulation of voluntary REC markets. And where any regulation or guidance does approach broader issues relating to electricity market regulations, it will likely be highly deferential to FERC—an agency that has been considerably more supportive of electricity competition than many of its state-level peers.<sup>180</sup>

## 2. *The State Role*

Because voluntary REC sales are most closely associated with the retail market, states have some authority to regulate voluntary REC sales—though this authority is largely untested. Outside the general state law contract principles which would apply to any transaction for RECs,<sup>181</sup> states have the clear ability to regulate when addressing the domestic intersection of the voluntary and compliance markets. FERC has already decreed that RECs—at least when used in the compliance context—are creations of state law and thus generally subject to state jurisdiction.<sup>182</sup> Even states with minimal regulation of voluntary REC trades usually have policies forbidding the “double-counting” of RECs for both compliance and voluntary purposes.<sup>183</sup> “Green pricing” programs run by the incumbent monopoly utilities also are an easy target for state regulation, as these utilities’ services are already under the pervasive oversight of state commissions.<sup>184</sup>

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179. Federal enforcement of green guidelines has been markedly inconsistent across administrations. See Perrin Cooke, Note, *Green Guide Gaps: Expanding FTC Authority over Low-Carbon Marketing Claims*, 39 COLUM. J. ENVTL. L. 105, 125-27 (2014) (noting the complete drop-off in FTC enforcement actions against misleading green claims during the Bush administration and their revival under the Obama administration).

180. See Kearney & Merrill, *supra* note 74, at 1367 (noting that FERC was historically one of the great champions of electricity market restructuring).

181. See, e.g., *Colo. & Santa Fe Energy Co. v. Nexant, Inc.*, No. C 12-00011 JSW, 2012 U.S. Dist. LEXIS 137514, at \*7-10 (N.D. Cal. Sept. 25, 2012) (applying California law to a suit alleging breach of contract where a REC buyer allegedly refused delivery under a contract for sale); *San Diego Gas & Elec. Co. v. Ninth Judicial Dist. Court*, 329 P.3d 1264, 1271 (Mont. 2014) (applying general contract and state law principles to conclude that a mandatory forum-selection clause contained in a REC sale contract required that the dispute be litigated in California).

182. See *supra* notes 172-73 and accompanying text.

183. See *supra* note 144 and accompanying text.

184. See, e.g., MONT. CODE ANN. § 69-8-210(2) (2014) (“[A] public utility shall offer its customers the option of purchasing a product composed of or supporting power from

But states are limited in their regulatory authority as well. The Dormant Commerce Clause places sharp limitations on the ability of a state to provide explicit or implicit preferences for products produced within its own borders.<sup>185</sup> Most obviously, states can only in the rarest of circumstances explicitly discriminate against out-of-state commercial actors.<sup>186</sup> A state-created private monopoly presumptively runs afoul of this restriction, as the functional effect is to restrict commercial activity to one (in-state) firm to the exclusion of all others (including all out-of-state competition).<sup>187</sup> Unless permitted by Congress,<sup>188</sup> “[s]tate and local governments may not use their regulatory power to favor local enterprise by prohibiting patronage of out-of-state competitors or their facilities.”<sup>189</sup>

For similar reasons, a state may not mandate that some or all of a given product be purchased from in-state providers. In *Wyoming v. Oklahoma*, the Supreme Court invalidated an Oklahoma statute which demanded that ten percent of the coal used by state utilities derive from Oklahoma sources.<sup>190</sup> The same logic would almost certainly prevent a state from prohibiting or disincentivizing the use of RECs generated from out-of-state providers from being used to meet RPS requirements, let alone bar their purchase on the voluntary market.<sup>191</sup>

Between those poles lie some thorny, and largely uncharted, regulatory questions. RECs can only be created when electricity is gener-

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certified environmentally preferred resources that include but are not limited to wind, solar, geothermal, and biomass, subject to review and approval by the commission. The commission shall ensure that these resources have been certified as meeting industry-accepted standards.”).

185. These limitations are default rules, but Congress can always *authorize* a state to engage in regulation that would otherwise violate the Dormant Commerce Clause. See *W. & S. Life Ins. Co. v. State Bd. of Equalization*, 451 U.S. 648, 652-53 (1981) (“If Congress ordains that the States may freely regulate an aspect of interstate commerce, any action taken by a State within the scope of the congressional authorization is rendered invulnerable to Commerce Clause challenge.”).

186. See *Maine v. Taylor*, 477 U.S. 131, 138 (1986) (“[O]nce a state law is shown to discriminate against interstate commerce either on its face or in practical effect, the burden falls on the State to demonstrate both that the statute serves a legitimate local purpose, and that this purpose could not be served as well by available nondiscriminatory means.”) (internal quotation marks omitted).

187. See *C & A Carbone, Inc. v. Town of Clarkstown*, 511 U.S. 383, 394-95 (1994). *But see* *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 341-42 (2007) (distinguishing *Carbone* where the monopoly was granted to a *public* entity).

188. See *supra* note 185. State authority to establish retail electricity monopolies can be implicitly found in the Federal Power Act. See *supra* note 94 and accompanying text.

189. *Carbone*, 511 U.S. at 394.

190. 502 U.S. 437, 440, 455 (1992).

191. See *Eisen*, *supra* note 110, at 308 (“In fact, a state cannot allow only power generated and sold within the state by in-state utilities to count[sic] toward the renewables requirement. If it did so the RPS would clearly run afoul of the dormant commerce clause.”).

ated. A regulation of RECs necessarily regulates electricity generation as well. Where a REC emerges from electricity generated out-of-state, state regulation borders precipitously on impermissible, extra-territorial lawmaking, in violation of the Dormant Commerce Clause.<sup>192</sup> A generation project located in state A, whose power is sold entirely to state B, would have to meet the requirements of state C if even a portion of any associated RECs were placed into that market.

*National Solid Wastes Management Association v. Meyer* is instructive.<sup>193</sup> There, Wisconsin prohibited use of Wisconsin landfills unless the waste was generated in a region that had an “effective recycling program” (as defined in the Wisconsin statute).<sup>194</sup> The Seventh Circuit struck down the law:

Wisconsin’s solid waste legislation conditions the use of Wisconsin landfills by non-Wisconsin waste generators on their home communities’ adoption and enforcement of Wisconsin recycling standards; all persons in that non-Wisconsin community must adhere to the Wisconsin standards whether or not they dump their waste in Wisconsin. . . . As a price for access to the Wisconsin market, it attempts to assume control of the integrity of the product that is moving in interstate commerce. Wisconsin’s approach to sound solid waste management, and no one else’s, must govern, even when the product will never cross its borders.<sup>195</sup>

By contrast, in *Energy & Environment Legal Institute v. Epel* the District of Colorado upheld a state RPS program against claims that it required out-of-state producers to generate electricity in accordance with Colorado’s definition of “renewable” power.<sup>196</sup> The court concluded that an RPS requirement does not impose any requirements whatsoever on out-of-state electricity generators—Colorado utilities can “buy and sell electricity from any in-state or out-of-state generator. The [RPS] does not limit these transactions, set minimum standards for out-of-state generators that wish to do business in Colorado, or attempt to control pricing of the electricity.”<sup>197</sup> Nor does the RPS mandate have any effect on wholly out-of-state transactions—a sale from a Wyoming generator to a South Dakota utility, for in-

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192. See, e.g., *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 582-83 (1986) (holding that laws which, in “practical effect,” regulate out-of-state transactions are unconstitutional under the Dormant Commerce Clause (citing *S. Pac. Co. v. Ariz. ex rel. Sullivan*, 325 U.S. 761, 775 (1945))).

193. See *Nat’l Solid Wastes Mgmt. Ass’n v. Meyer*, 63 F.3d 652 (7th Cir. 1995).

194. *Id.* at 653.

195. *Id.* at 658, 661.

196. *Energy & Env’t Legal Inst. v. Epel*, No. 11-cv-00859-WJM-BNB, 2014 U.S. Dist. LEXIS 64285, at \*19 (D. Colo. May 9, 2014).

197. *Id.* at \*20-21.

stance.<sup>198</sup> The only time the RPS program comes into play is if the out-of-state generators wished for their energy to count towards Colorado's RPS mandate.<sup>199</sup>

*Epel* suggests that the Dormant Commerce Clause is not implicated so long as foreign power generators can access the REC market on equal terms compared to in-state (Colorado) peers. This has very different implications in the context of the voluntary REC market compared to the compliance market *Epel* addressed. Consider the question of whether RECs can be sold "unbundled" from corresponding power sales. While most states permit unbundled RECs to count towards meeting RPS goals, some require that the power and RECs be sold together.<sup>200</sup> The compliance RPS market exists at the wholesale level—the power at issue is being sold to utilities for resale to consumers—and so there is opportunity for various players (including out-of-state firms) to participate in providing RPS-eligible renewable power even if the local commission imposes a bundling requirement. But the voluntary market occurs at the retail level—a bundling requirement there would take the utilities' sanctioned monopoly over retail sale of *power* and bootstrap it onto the *REC* market as well. As neither the Federal Power Act nor any other statute gives state regulators the authority to circumvent the Dormant Commerce Clause where REC sales are concerned, this would seem to run afoul of constitutional strictures.<sup>201</sup>

Because states have yet to extensively regulate voluntary REC sales and there have been no reported cases concerning the subject, assessing how these questions will ultimately be answered is at best speculative. Still, certain predictions can be made. States probably can impose general standards of conduct upon voluntary REC sales, including requirements of transparency, enumeration of specific fuels considered to be or not be "renewable" in character, and other like concerns. These requirements would have to be universal, however; they could not discriminate against out-of-state REC providers. Nor, in all likelihood, could states simply grant the exclusive right to sell RECs to a single provider (most likely, the incumbent monopoly). In essence, while states retain considerable regulatory authority over the voluntary REC market, their powers—and their ability to block competition outright—are not nearly as expansive as they are in the retail electricity sector generally.

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198. *Id.* at \*19-20.

199. *Id.* at \*21.

200. See *supra* note 128; see also, e.g., N.M. Indus. Energy Consumers v. N.M. Pub. Regulation Comm'n, No. 33,244, 2012 N.M. Unpub. LEXIS 2, at \*3-5 (N.M. June 7, 2012) (declining, on mootness grounds, to review a New Mexico Commission ruling which rejected an RPS compliance plan that incorporated unbundled RECs).

201. See *supra* notes 185-89 and accompanying text.

#### IV. THE FOOT IN THE DOOR: VOLUNTARY REC SALES AND ELECTRICITY COMPETITION

Even though the call for retail electricity competition has died down, it is unlikely that the cause of electricity choice has been abandoned for good. On the one hand, “traditional regulation . . . will remain vulnerable to opportunistic attacks from organized groups, e.g., large industrials, independent producers, and even some utilities, or political entrepreneurs who stand to reap large gains from a change in the status quo.”<sup>202</sup> On the other hand, incumbent interests—often with the support of friendly state regulators—will continue to fight vigorously to maintain their privileged position in the status quo.<sup>203</sup> The outcome of such battles will likely depend on the relative strength of the political and economic interests that can be brought to bear against the relevant regulatory authorities.

Proponents of electricity restructuring have already created an umbrella lobbying group known as the COMPETE Coalition, consisting of “781 electricity stakeholders, including customers, suppliers, traditional and clean energy generators, transmission owners, trade associations, technology innovators, environmental organizations and economic development corporations.”<sup>204</sup> This organization, whose membership ranges from Sempra Energy (parent of San Diego Gas & Electric) to the Wendy’s/Arby’s Group,<sup>205</sup> helps organize diverse entities within the electricity marketplace in support of “well-structured competitive electricity markets.”<sup>206</sup> While organizations like COMPETE will no doubt be relevant to crafting and implementing a broad-based strategy in pursuit of restructuring, this Part does not focus on such traditional lobbying forms. Rather, in keeping with the analysis in Part I, it focuses on how the seemingly mundane decision to enter into the voluntary REC market could itself open opportunities in a manner similar to more traditional social movement advocacy.

The prior Sections demonstrate two important features about the voluntary REC market pertinent to its impact on retail restructuring debates. First, it is a unique transaction in the electricity context be-

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202. John S. Moot, *Economic Theories of Regulation and Electricity Restructuring*, 25 ENERGY L.J. 273, 303 (2004).

203. See Pierce, *supra* note 105, at 491-92 (arguing that the “just say no” utilities and their allied state utility commissions will continue to oppose retail competition for the foreseeable future); see also *supra* notes 86-101 and accompanying text (noting the various forces blocking retail electricity restructuring).

204. *About COMPETE: Competition in Electricity Markets*, COMPETE, <http://www.competecoalition.com/about> (last visited Apr. 4, 2015).

205. *COMPETE Coalition Members*, COMPETE, <http://www.competecoalition.com/members> (last visited Apr. 4, 2015).

206. *About COMPETE*, *supra* note 204.

cause it bypasses the natural monopoly created by the wires and thus enables direct contact between retail consumers and multiple market participants, even where restructuring has not occurred. Second, states are limited in their ability to limit competition in this area—at least compared to their expansive authority to create and maintain a monopoly in the retail electricity sector more broadly.

These characteristics of the voluntary REC market share important characteristics with prior market developments which have helped spur energy competition and overcome resistance from incumbent monopolies. Although RECs are not themselves a dominant part of the retail electricity market, their relatively unregulated nature gives new market entrants a toehold in markets that otherwise are entirely closed off to competition.<sup>207</sup> From humble beginnings, these external players can gather customers, lobby legislators and administrative agencies, and effectively present themselves as genuine, lower-cost alternatives to the incumbent monopolies.

To be sure, this is not an inevitability. There are several reasons to refrain from overstating the pro-competitive effects of voluntary REC transactions. The connection between REC sales and retail electricity service is more attenuated than, say, the connection between small generator competition authorized by PURPA and generation markets more broadly. Moreover, observing that states have comparatively *less* authority over voluntary RECs is not to say they have none—a sufficiently aggressive state regulatory commission could still find creative ways to intervene in favor of the incumbent monopoly and against novel market entrants.

Yet the strategy of using RECs as a foot in the door to promote wider reform effort retains appeal. The literature on law and social movements offers a fruitful way of understanding how a seemingly minor alteration in the economic structure of electricity markets might have significant impacts on a related, yet clearly distinct, policy debate. Voluntary RECs offer a chance for additional electricity market participants to gain influence in new states and territories, directly engage with potential customers and recruit them as allies in broader political campaigns, and create the space for partial reforms which may, over time, grease the path down toward larger electricity reform initiatives.

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207. See Ingo Vogelsang, *Network Utilities in the U.S. – Sector Reforms Without Privatization* 24 (CESifo, Working Paper No. 1142, 2004), available at [https://www.cesifo-group.de/ifoHome/publications/working-papers/CESifoWP/CESifoWPdetails?wp\\_num=1142&CESifoWP.search=+](https://www.cesifo-group.de/ifoHome/publications/working-papers/CESifoWP/CESifoWPdetails?wp_num=1142&CESifoWP.search=+) (“Liberalization almost invariably started with entrepreneurs who tried to overcome regulatory entry barriers. Under the multifaceted U.S. regulatory system they were able to get a foot in the door and offer services in some restricted geographic or product space.”).

Conceptualizing the business decision to enter the voluntary REC market in social movement terms reveals how this maneuver could alter the playing field and reinvigorate the case for electricity restructuring. The presumed natural monopoly of utilities seemed to make retail competition impossible; even once experience with wholesale wheeling illuminated a theoretical path to retail restructuring, after an initial burst of success, advocates of restructuring have found no way to alter the political dynamics in states that continue to adhere to the old monopoly model. The development of a voluntary REC market—an electricity “product” that can be sold directly to consumers regardless of the overall state of the retail electricity market—reshuffles the deck and provides new opportunities for market penetration.

In short, voluntary RECs matter to advocates of retail restructuring, but not because they represent some massive new economic opportunity or require regulatory interpretations that demand retail competition as well. Their impacts are more subtle, relating to how advocates for restructuring can alter their position in the communities they wish to influence. Such seemingly minor changes can cast a large shadow when attempting to tackle longstanding incumbent monopolies and the agencies which are responsible for creating the pertinent regulatory climate. Surveying efforts by reformers to alter entrenched but (arguably) inefficient political systems, Eric Patashnik identifies three key conditions for successful social change: First, reformers must alter the procedural context used to make decisions, as the defaults typically favor incumbents; second, they must raise awareness amongst unengaged citizens; and third, they must often make tactical concessions to their opposition to enable a viable reform coalition to emerge.<sup>208</sup> As will be demonstrated in the final Section, voluntary REC sales carry with them the potential to enable each of these conditions.

#### A. *Persuading Policymakers and Altering Decisional Defaults*

Advocates of retail restructuring in a monopoly state suffer from a chicken-and-egg problem—they must gain a foothold in a state in order to have any hope of influencing policymakers and regulators who already have strong connections to incumbent monopolies; but that very monopoly status under debate prevents them from gaining any leverage within the state. Voluntary REC sales offer an opportunity to shift the political calculus in locations where the influence of monopoly providers has been relatively uncontested. In essence, the voluntary REC market alters the procedural order of the retail electrici-

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208. PATASHNIK, *supra* note 30, at 19-22.

ty debate by moving the initial decision—can there be competition *at all*—out of the hands of the regulatory body.<sup>209</sup> Generators, power marketers, and other market participants which have no way of reaching consumers in regulated environments can easily participate in the REC market without running afoul of the incumbent's exclusive monopoly franchise. In other words, the voluntary REC market changes the political and economic posture of the entities seeking retail competition—instead of being pure outsiders with no connection with or constituency within the target state, they can come to regulators and policymakers with a list of consumers and potential base of support already in place.<sup>210</sup>

Of course, the voluntary REC market does not itself demand that these proposals come to fruition. Signing up a voluntary REC customer does not, for example, grant the company any retail authority, nor is such authority necessary for REC markets to function properly. This is rather a story about altering the political and regulatory landscape.<sup>211</sup> Voluntary REC sales provide a foot in the door for additional participants beyond the monopoly providers to gain leverage and influence as economic and political players in hitherto monopoly regions.

Eugene Volokh's notion of a "political power slippery slope" is a useful analogue.<sup>212</sup> He provides the example of a hypothetical Supreme Court decision permitting the sale of marijuana while also allowing Congress to ban its advertisement.<sup>213</sup> On its face, this decision would allow Congress to decriminalize marijuana without worrying that such an enactment would necessarily lead to the advertisement of the drug.<sup>214</sup> But practically speaking, the legalization of marijuana will create a multi-billion dollar industry with a strong incentive to

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209. See Paul Pierson, *Not Just What, but When: Timing and Sequence in Political Processes*, 14 STUD. AM. POL. DEV. 72, 73-74 (2000) (outlining the importance of sequencing in determining political outcomes).

210. See PATASHNIK, *supra* note 30, at 28 (noting that while political scientists often "focus on durable changes in *formal* authority. . . . [T]he uncoordinated and often unpredictable choices of producers and millions of consumers arguably often have a greater influence over social outcomes in many policy sectors than do elected officials, lobbyists, or voters.").

211. Much has been written about "policy feedback"—the idea that "policies may themselves reshape the political environment." Suzanne Mettler & Joe Soss, *The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics*, 2 PERSP. ON POL. 55, 60 (2004); see also PATASHNIK, *supra* note 30, at 29. This argument differs slightly in that it posits how an emergent market opportunity might alter the political environment of a related but distinct business sector.

212. Eugene Volokh, *The Mechanisms of the Slippery Slope*, 116 HARV. L. REV. 1026, 1114-20 (2003).

213. *Id.* at 1114.

214. See *id.* ("Now Congress can enact a law that allows marijuana sales but not advertising (decision A) without fear that the Court will hold that marijuana advertising must also be legal (result B).").

overturn the advertising ban as well.<sup>215</sup> In effect, the law creates a new powerful interest group which—although not guaranteed to prevail in Congress or the court of public opinion—certainly is better positioned to advance its interests than it was prior to the initial decision.

A similar story can be told regarding the introduction of competition into the long-distance telephone services market. For many years a sector monopolized by the Bell system, the initial crack of competition came when the FCC allowed other companies to offer “private line” services.<sup>216</sup> At the time, the FCC did not view this as a dramatic step—one commissioner characterized it as providing “a little salt and pepper of competition to” the general rule of regulatory protection.<sup>217</sup> But the direct-line firms had no interest in staying confined inside their box and quickly moved to expand into the general long-distance telephone markets.<sup>218</sup> Though initially resistant, the FCC proved unable to maintain its opposition for long, “and the rest, as they say, is history.”<sup>219</sup>

As the preceding Section demonstrated, the voluntary REC market lacks the economic and regulatory characteristics that give state regulatory commissions authority to block retail electricity competition.<sup>220</sup> It is not a natural monopoly, and neither the Federal Power Act nor any other statute enables states to circumvent the Dormant Commerce Clause and enact protective legislation favoring local utilities. These characteristics provide a safe harbor for competition, but only a limited one—the ability to sell RECs freely does nothing to alter the plenary authority state commissions possess over retail wheeling. However, just as in Volokh’s example where the hypothetical court decision only guaranteed the ability to sell marijuana, not the right to advertise it, the ability to engage in voluntary REC sales creates new stakeholders who in turn can accumulate political capital for the pursuit of additional reforms.

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215. *See id.* at 1114-15.

216. Kearney & Merrill, *supra* note 74, at 1342-43 (discussing Applications of Microwave Comm’ns, Inc. for Constr. Permits, 18 F.C.C.2d 953 (1969) and Establishment of Policies & Procedures for Consideration of Application to Provide Specialized Common Carrier Servs. in the Domestic Pub. Point-to-Point Microwave Radio Serv., 29 F.C.C.2d 870 (1971)).

217. Jim Chen, *The Legal Process and Political Economy of Telecommunications Reform*, 97 COLUM. L. REV. 835, 845 (1997) (quoting Comm’r Nicolas Johnson).

218. *See id.* (observing that the direct-line decision “sparked a conflagration that the FCC could not contain”); Kearney & Merrill, *supra* note 74, at 1343 (“But competition could not be easily confined to private-line services.”).

219. Kearney & Merrill, *supra* note 74, at 1343; *see* MCI Telecomms. Corp. v. FCC, 561 F.2d 365, 380-81 (D.C. Cir. 1977) (overturning an FCC decision rejecting direct competition by MCI against AT&T in the long-distance telephone market).

220. *See supra* Part II.B.

This avenue—relatively small nods toward competition creating momentum towards further liberalization by increasing the power of alternative stakeholders—has long been a feature of the energy market. PURPA provides one template. There was no inherent reason why enabling a narrow class of small generators to hook into the grid would necessarily lead to widespread competition within the energy generation sector. But PURPA revealed both a hunger for new generation options and, perhaps more importantly, created a constituency which could effectively press for still greater liberalization efforts.<sup>221</sup>

More recently, the renewable energy sector has also used its foothold in state politics to successfully combat dominant energy players in the fight over climate change legislation. The 2010 defeat of California's Proposition 23—which would have effectively repealed California's carbon dioxide emissions regulations—is illustrative.<sup>222</sup> As Eric Biber observes, 2010 was generally not a good year for supporters of environmental causes, in the energy sector or otherwise.<sup>223</sup> What made California different? Unlike many states, California has long aggressively promoted renewable energy and the renewable energy industry, creating a strong domestic political counterweight to traditional energy interests.<sup>224</sup> Moreover, even companies that had deep ties to “dirty” energy production in California had also invested in greening technology and initiatives—sometimes to comply with state RPS mandates, sometimes to access new market opportunities spurred by their greener competitors.<sup>225</sup> Together, these factors increased the political leverage environmental proponents had within California and neutered some opposition that might have otherwise been expected from large energy interests.

The REC market offers a similar opening for competitive forces to gain a foothold amongst retail consumers and better position themselves to influence the regulatory and legislative agenda. The history

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221. See Vogelsang, *supra* note 207, at 24 (“Eventually, and with the help of new entrants and customer groups envisaging benefits they were able to convince regulators, courts and legislators about the benefits of liberalization.”).

222. See Eric Biber, *Cultivating a Green Political Landscape: Lessons for Climate Change Policy from the Defeat of California's Proposition 23*, 66 VAND. L. REV. 399, 403-04 (2013).

223. See *id.* at 400 (noting that at the federal level, any hopes of comprehensive climate change legislation were dashed by the landslide victory of conservative Republicans into the House).

224. See *id.* at 401 (“California is different in significant part because of history, specifically the long history of its aggressive efforts to develop energy policy that increases efficiency and reduces dependence on fossil fuels. Those policies have, over the years, created an interest group landscape that is supportive of stricter efforts to restrict carbon emissions and hostile to efforts to repeal energy efficiency and renewable energy mandates—as shown by the details of the campaign over Proposition 23.”).

225. See *id.* at 420-25.

of electricity competition is intricately tied up in the environmental and renewable energy movement. As noted above, the first step in electricity restructuring came in the form of PURPA—a statute designed to promote the generation of renewable, environmentally sustainable energy.<sup>226</sup> Retail electricity restructuring was similarly promoted as serving environmental goals—most notably, by giving consumers the chance to choose partial or total green power options above and beyond what incumbent utilities were offering.<sup>227</sup> Surveys indicated that large majorities were willing to pay at least slightly more money to have renewable power.<sup>228</sup> Where the market for voluntary RECs exists, a market for green power choice likely exists alongside of it.

### B. Gaining New Consumers (and Constituents)

Voluntary REC market participants can also leverage their contacts with their customers to promote support for restructuring by the consumers themselves. While the prior Section focused on the influence wielded by the REC sellers themselves, this Section emphasizes how REC consumers can be mobilized to counter the power of utility companies in front of utility commissions. Regulators “are responsive not only to the fixed preferences of well-informed voters, but also to the *potential* preferences of constituents who could become active and attentive if provoked.”<sup>229</sup> Voluntary REC sales can help render coherent and salient a previously diffuse and disorganized consumer base which might favor restructuring.

Voluntary REC sales offer a particularly attractive opportunity for gaining consumers in the electricity sector because there is clearly room for new entrants to undercut existing programs from monopoly providers unaccustomed to competition. Already, unbundled REC sales—sales that do not require the physical delivery of electricity and thus bypass the natural monopoly—represent a majority of all

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226. See *supra* Part I.B.1.

227. See Palmer & Burtraw, *supra* note 7, at 184 (“[S]ome view the move toward greater consumer choice as a way to allow consumers to express demand for green power in the market place.”).

228. See BARBARA C. FARHAR, NAT’L RENEWABLE ENERGY LAB., WILLINGNESS TO PAY FOR ELECTRICITY FROM RENEWABLE RESOURCES: A REVIEW OF UTILITY MARKET RESEARCH 2 (1999), available at <http://www.nrel.gov/docs/fy99osti/26148.pdf> (noting that without being exposed to any special educational programs or materials, between 52% and 95% of residential consumers were “willing to pay at least a modest amount more per month on their electric bills for power from renewable sources”).

229. See PATASHNIK, *supra* note 30, at 156; see also Schraub, *Sticky Slopes*, *supra* note 9, at 1260 (noting that while normal mobilization and countermobilization stories focus on “activat[ing] latent preferences,” social changes can also bring “completely new political actors onto the battlefield”).

green power sales in the United States.<sup>230</sup> Many monopoly states have “green pricing” programs where customers can purchase blocks of RECs from the incumbent. NC GreenPower (used by monopoly utilities in North Carolina), for example, offers RECs at a retail rate of \$4 per 100 kilowatt/hours (kWh), or \$2.50 wholesale.<sup>231</sup> Against this figure, unbundled REC sales offer a very competitive alternative—the current market rate for RECs on the voluntary market is less than \$1 per *megawatt*/hour (or 10 cents per 100 kWh).<sup>232</sup> And unlike retail competition itself, where friendly state commissions can block outright the emergence of lower-cost competitors, state utility commissions are sharply limited in their ability to limit voluntary REC sales.<sup>233</sup>

Potential profits are likely just the tip of the iceberg, however. More important from a retail restructuring perspective is the opportunity for new entrants to create a regular month-to-month relationship with consumers and access important consumer data invaluable to power marketers.<sup>234</sup> Monopoly status aside, incumbent utilities are at an advantage over potential upstarts because they already possess this intimate relationship with their consumers, a position which lets them act as a “gatekeeper between the consumer and the electric grid.”<sup>235</sup> Even outside of a monopoly context, this sort of regular, relational interaction between company and consumer acts to reduce the consumers’ effective choices by channeling their economic energies into a loyal relationship with a single provider.<sup>236</sup> Given the intimate

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230. HEETER ET AL., *supra* note 136, at 7 (“Historically, REC markets have represented the largest share of the voluntary market—larger than the volumes of green power sold through utility programs or competitive retail suppliers. In 2010, 56% of all green power sales occurred as REC only transactions that are separate from electricity sales.”) (footnote omitted).

231. See, e.g., *NC GreenPower*, DOMINION, <https://www.dom.com/residential/dominion-north-carolina-power/ways-to-save/renewable-energy-programs/nc-greenpower> (last visited Apr. 4, 2015).

232. See HEETER ET AL., *supra* note 136, at 20.

233. See *supra* Part II.B.

234. In conversations with practitioners, regulators, and electricity industry executives, all have emphasized the utility’s pre-existing, regular relationship with consumers as a key advantage it possesses over competitors and also a key barrier that non-incumbents face when seeking to gain significant retail electricity market shares.

235. Michael P. Vandenberg & Jim Rossi, *Good for You, Bad for Us: The Financial Disincentive for Net Demand Reduction*, 65 VAND. L. REV. 1527, 1544 (2012); see also Angelina Liang, Note, *Shedding Light: The Role of Public Utility Commissions in Encouraging Adoption of Energy Efficient Lighting by Low-Income Households*, 38 COLUM. J. ENVTL. L. 333, 360 (2013) (noting this unique position of the utility offers opportunities to educate consumers but also poses risks insofar as utilities are effectively the only purveyors of information regarding electricity to consumers).

236. Jagdish N. Sheth & Atul Parvatiyar, *Relationship Marketing in Consumer Markets: Antecedents and Consequences*, 23 J. ACAD. MARKETING SCI. 255, 256 (1995) (defining “relational market behavior” as a consumers’ decision to engage in “purposeful

relationship incumbents already enjoy with electricity consumers, it has been historically difficult for potential competitors to build up even a potential constituency that might contemplate switching. And without a customer base willing to at least consider switching to a different provider, retail restructuring is little more than a theoretical debate.

Emerging “smart meter” reforms—which aim to give consumers real information about their electricity usage to help conserve energy and reduce usage during high-demand, high-price times—have opened up this relationship somewhat in recent years.<sup>237</sup> For example, the “green button” initiative, pioneered in California and now being promoted nationwide, seeks to provide consumers with “standard, routine, easy-to-understand access to their own energy usage data” that can be (if the consumer desires) shared with third-parties to assist them in managing their energy usage.<sup>238</sup> For (legitimate) privacy reasons, however, this information is not openly available—consumers must voluntarily elect to disclose it.<sup>239</sup>

Offering voluntary RECs gives third parties the opportunity to build a month-to-month electricity relationship similar to what the utilities enjoy (albeit on a much smaller scale). Crafting this relationship opens the door to accessing the consumers’ smart-grid information. Put bluntly, offering voluntary RECs to retail consumers offers a credible way for electricity companies to convince those consumers to give them access to their electricity usage data on a month-to-month basis. This information is of essential import if potential

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choice reduction” by entering into a loyal relationship with a single provider in lieu of pursuing other competitive opportunities).

237. See, e.g., Sarah Darby, *Smart Metering: What Potential for Householder Engagement?*, 38 BUILDING RES. & INFO. 442, 443 (2010) (exploring the ways in which smart-metering expands the possibilities through which consumers can engage with their energy usage); Joel B. Eisen, *Smart Regulation and Federalism for the Smart Grid*, 37 HARV. ENVTL. L. REV. 1, 10 (2013) (“By 2015, 65 million American homes and businesses may have smart meters that enable two-way communication between utilities and customers.”).

Smart-metering need not be passive either—some forms allow consumers to “pre-commit” to only run high-energy appliances during off-peak times, thus saving money and reducing grid stress during peak hours. See Stephanie M. Stern, *Smart-Grid: Technology and the Psychology of Environmental Behavior Change*, 86 CHI.-KENT L. REV. 139, 145-46 (2011) (noting that smart-grid technology “can also be utilized to allow consumers to ‘pre-commit’ to operating appliances or consuming higher levels of electricity during times when energy demand and cost are lower”).

238. Aneesh Chopra, *Green Button: Providing Consumers with Access to Their Energy Data*, ENERGY.GOV (Jan. 19, 2012, 2:54 PM), <http://energy.gov/articles/green-button-providing-consumers-access-their-energy-data>.

239. For a discussion on the privacy implications of smart-metering, see, for example, Cheryl Dancey Balough, *Privacy Implications of Smart Meters*, 86 CHI.-KENT L. REV. 161 (2011); John R. Forbush, *Regulating the Use and Sharing of Energy Consumption Data: Assessing California’s SB 1476 Smart Meter Privacy Statute*, 75 ALB. L. REV. 341 (2012).

retail competitors are to persuade anyone that they can offer electricity service at a lower price compared to the residents' default operator.

In addition, once the consumer base is in place, companies can leverage their connections to the consumer to convert their interest in RECs into an interest in retail choice generally. To be sure, demonstration of a viable consumer base can have political impacts even where that base cannot be successfully mobilized, because the fact that the market exists is demonstrative of an economic (and thus potentially political) constituency favoring greater reforms.<sup>240</sup> This dynamic helped promote support for RPS programs in many states where successful penetration by the voluntary market demonstrated sustained interest in and support for such renewable programs and was integral in subsequent decisions to pass mandatory RPS.<sup>241</sup>

Similar mechanics could play out in the restructuring context: From the beginning, the push for electricity restructuring has included a strong environmental component as advocates sought to give consumers the ability to choose power providers that were greener than the incumbent monopolies. Consumers electing to buy voluntary RECs are likely to be consumers who would be amenable to buying (bundled) green electricity, or at the very least consumers who have demonstrated a willingness to be active participants in electricity-purchasing decisions. Voluntary REC purchasers present a new potentially salient energy constituency towards which policymakers must be responsive, which in turn alters the political dynamic of energy policy debates.

That said, the voluntary REC market offers specific opportunities for mobilizing consumers as potential constituents for retail electricity choice. The voluntary market is highly dependent on direct marketing, which creates opportunities for direct interaction between company and consumer and allows them an effective avenue for promoting alternative energy supply arrangements.<sup>242</sup> Marketing theorists have long asserted that such relationships between a company and its consumers can create a cadre of customers "committed to their market offerings."<sup>243</sup> Less explored is the prospect that these

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240. See *supra* note 229 and accompanying text (noting that policymakers are responsive to potential constituencies which may become "active" at a later date).

241. See Bird & Lokey, *supra* note 136, at 2-3, 18.

242. See *id.* at 18 ("Because of the emphasis on marketing, voluntary green power programs can raise awareness and educate consumers about the benefits of renewable energy in general . . .").

243. Sheth & Parvatiyar, *supra* note 236, at 264. For the theoretical underpinnings of relationship research in the marketing context, see Susan Fournier, *Consumers and Their Brands: Developing Relationship Theory in Consumer Research*, 24 J. CONSUMER RES. 343, 344-47 (1998).

consumers may themselves be enlisted as political allies for altering unattractive regulatory climates.<sup>244</sup> While the American regulatory structure acts “as if ‘business’ and ‘consumers’ were in a basically adversary relationship,”<sup>245</sup> relational marketing suggests that consumers do not (or at least do not always) view the brands they engage with in such hostile terms.<sup>246</sup> Companies that gain the trust and loyalty of a cadre of consumers may be able to mobilize said consumers as a second front in endeavors to lobby regulators and policymakers.

### C. Partial Victories and Limited Competition

Even if it does not result in total deregulation of the retail electricity sector, voluntary REC sales can have more modest pro-competitive effects. One potential candidate for reform is the possibility that vibrant, voluntary REC sales will increase support for mandatory RPS programs. While RPS programs have been implemented in many states, there remain a significant number of holdouts.<sup>247</sup> As noted above,<sup>248</sup> a vibrant voluntary REC market can increase political support for mandatory RPS programs by demonstrating the existence of popular demand for renewable power options.

Another area where partial pro-competitive advances may be realized is in the area of “net metering.” Net metering refers to arrangements where local consumers install renewable generation units (most frequently solar) which feed additional renewable power into the system, off-setting some or all of their own power usage.<sup>249</sup> Advo-

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244. Cf. Chenchen Huang et al., *Timeshare Owners’ Perceptions and Preferred Ways of Participating in Tourism Planning*, 20 J. HOSPITALITY MARKETING & MGMT. 103, 104 (2011) (“For the timeshare industry, to mobilize their customers and get them involved in tourism planning is an important channel to get the industry’s voice heard.”).

245. STEPHEN BREYER, REGULATION AND ITS REFORM 6 (1982).

246. See, e.g., Neeli Bendapudi & Leonard L. Berry, *Customers’ Motivations for Maintaining Relationships with Service Providers*, 73 J. RETAILING 15, 29 (1997) (noting that in relationships where the consumer feels a sense of “dedication” (or affection) towards a particular firm, they are more likely to engage in actively cooperative behavior alongside the firm); Matthew Thomson et al., *The Ties That Bind: Measuring the Strength of Consumers’ Emotional Attachments to Brands*, 15 J. CONSUMER PSYCHOL. 77, 77-78 (2005) (discussing the concept of emotional attachment as to brands and how it might motivate persons to take actions which favor the brands’ interests even where they are not obviously in the consumers’ own self-interest).

247. See, e.g., Gabe Maser, Note, *It’s Electric, but FERC’s Cost-Causation Boogie-Woogie Fails to Justify Socialized Costs for Renewable Transmission*, 100 GEO. L.J. 1829, 1833 (2012) (noting Indiana’s decision to forego an RPS requirement and instead have only a voluntary renewable energy target).

248. See *supra* note 241 and accompanying text.

249. See Shannon Baker-Branstetter, *Distributed Renewable Generation: The Trifecta of Energy Solutions to Curb Carbon Emissions, Reduce Pollutants, and Empower Ratepayers*, 22 VILL. ENVTL. L.J. 1, 7-8 (2011) (discussing net metering policies whereby consumer-generators receive cash payments for excess power they generate and feed into the grid beyond their own usage).

cates of net metering have explicitly characterized it as an effort to “democratize the grid” and “take electricity services away from utilities.”<sup>250</sup> Ironically, such distributed generation has encountered heavy resistance in the southeastern United States, where abundant sunlight has proven no match for incumbent monopolies jealously protecting their exclusive right to sell power.<sup>251</sup> But this might be changing. In Florida, a hybrid liberal/conservative alliance has begun pushing for new rules allowing rooftop-solar owners to sell their excess power directly to consumers.<sup>252</sup> Framed as a direct challenge to “excessive utility control over Florida’s energy generation,” the initiative combines liberal support for increased renewable energy options with conservative preference for freer markets and more open competition.<sup>253</sup>

Participants in the voluntary REC market have an opportunity for synergy with net metering advocates on at least three dimensions. First, where a consumer produces more renewable power than they consume, net metering should create an additional source of REC supplies that marketers can in turn resell to customers who either are unable or unwilling to directly participate in distributed generation programs. Second, where a consumer generates less renewable energy than their ultimate usage (that is, they are still partially dependent on dirty energy from the grid), the relative decrease in electricity usage may still redound to the benefit of REC sellers by increasing the margins on their REC sales.<sup>254</sup> Finally, the entities

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250. Melissa Powers, *Small Is (Still) Beautiful: Designing U.S. Energy Policies to Increase Localized Renewable Energy Generation*, 30 WIS. INT’L L.J. 595, 657 (2012).

251. See Evan Halper, *Rules Prevent Solar Panels in Many States with Abundant Sunlight*, L.A. TIMES (Aug. 9, 2014, 7:15 PM), <http://www.latimes.com/nation/la-na-no-solar-20140810-story.html#page=1>. The Southeast is a region where regulatory opposition to retail competition is particularly entrenched. See Pierce, *supra* note 105, at 484 (“In the Southeast, in particular, the ‘just say no’ utilities have been able to use the formidable powers of their state PUCs as a shield to protect them from FERC’s efforts to expose them to competition.”).

252. See Gavin Bade, *GOP-Led Ballot Measure Seeks to Grow Rooftop Solar Market in Florida*, UTIL. DIVE (Jan. 7, 2015), <http://www.utilitydive.com/news/gop-led-ballot-measure-seeks-to-grow-rooftop-solar-market-in-florida/349598/>.

253. *Id.*

254. This depends on the pricing model the REC seller uses. If they offer to cover a consumer’s entire energy usage for a single flat rate, then the REC seller benefits when the consumer uses less energy (and they have fewer RECs to compensate), while the consumer benefits if they use more power (getting more green energy for each dollar spent). By contrast, if the seller offers variable pricing, depending on the consumer’s actual electricity usage, then the REC seller has an incentive for the consumer to use more power, because it makes its money on the marginal cost of each credit sold, while consumers are incentivized to use less.

This problem—electricity programs providing an incentive for over-consumption, as opposed to energy efficiency—is of longstanding import in the power industry. Traditional block rates allowed utilities to cover their fixed capital costs by lowering their rates as more power was consumed (so long as the price paid by the average consumer

which generate renewable power—and thus RECs—will also often be best positioned to help install and maintain distributed generation resources.

Recent research on the diffusion of rooftop-solar installation has found a strong “neighbor” effect—persons are considerably more likely to obtain household solar installations where others around them have done so as well.<sup>255</sup> These cascade effects focus on the spatiality of adapting new technologies or practices, but they also point to the importance of social interactions between neighboring stakeholders as a means of altering status quo behavior.<sup>256</sup> People are more likely to alter their behavior when presented with successful models of such alterations from their peers. And people are more likely to support changes to their settled practices if a proposed change is seen as an outgrowth of familiar purchases, behaviors, or models. In either case, local diffusion of the novel electricity product brings opportunities to further leverage the gains.

Functionally, REC markets give new market entrants access to customers in monopoly states and put them in a position where they can more effectively advocate for their interests in state politics. That does not guarantee that retail electricity restructuring will follow—and perhaps that is how it should be. The risks and benefits of electricity competition are not uniform throughout all fifty states, and it may be quite proper that each state retain the ability to decide for itself whether and to what extent competition would benefit its citizens. This decision, however, should be made on the merits in a political climate where all relevant positions are aired and all affected constituencies are heard. No longer boxed out of the political economy of monopoly states, the inherently competitive nature of the REC market and the corresponding foothold it can give new market entrants means advocates for competition can press their case on a level (or at least less lopsided) playing field.

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approximated the average cost of the wattage). These distorted prices in favor of overconsumption and modern pricing models have instead sought to increase the accuracy of price signals by having consumers pay the marginal cost of producing the next kilowatt of power. See Joseph P. Tomain, “Steel in the Ground”: *Greening the Grid with the iUtility*, 39 ENVTL. L. 931, 947-48 (2009).

255. See Marcello Graziano & Kenneth Gillingham, *Spatial Patterns of Solar Photovoltaic System Adoption: The Influence of Neighbors and the Built Environment*, 15 J. ECON. GEOGRAPHY (forthcoming 2015). Note that this Article specifically examined rooftop solar diffusion in Connecticut, where the authors noted that political and regulatory bodies have taken substantial affirmative steps to encourage distributed generation. It is unclear whether these findings would replicate in more ambivalent political climates.

256. See generally William A. Brock & Steven N. Durlauf, *Adoption Curves and Social Interactions*, 8 J. EUR. ECON. ASS'N 232 (2010) (identifying properties of adoption curves that imply the presence of social interactions and their effect on the adoption of new technologies).

## V. CONCLUSION

The voluntary REC market is unique in the electricity context: it allows electricity generators and other market participants the ability to directly connect with electricity consumers. This removes an important hurdle blocking the reinvigoration of electricity competition—neither incumbent providers nor unsympathetic state commissions can wholly box out potential competitors from any participation in the retail electricity marketplace. Where restructuring proceeds from there will likely continue to vary from one state to the next. But even the partial incorporation of new players in the retail electricity market holds the potential to reinvigorate the largely moribund cause of electricity restructuring. As in the past, public demand for additional green energy options may be the best opportunity for seeing a renewal of electricity competition.