

Here Comes the Sun: How Securities Regulations Cast a Shadow on the Growth of Community Solar in the United States



Samantha Booth

ABSTRACT

The cascading cost of solar photovoltaic technologies over the past five years presents a ripe opportunity to change the way people think about solar energy, and the nascent community solar model offers the vehicle for such change. Community solar offers any electricity ratepayer the opportunity to purchase a small portion—as little as one panel—of an offsite, local solar array in exchange for reductions in the ratepayer’s utility bill for the entire life of the solar system. By removing traditional siting and financial barriers to solar ownership, community solar drastically expands access to solar energy to persons of all socioeconomic levels while also conferring a host of ancillary benefits.

Although traditional financial barriers to solar ownership have been effectively eroded, inflexible securities regulations continue to pose a formidable threat to the fledgling community solar model by imposing onerous and expensive registration and information disclosure requirements—essentially creating a minefield of potential liability for community solar developers. Due to the novelty of the community solar model, however, courts have yet to consider whether this arrangement constitutes a “security” within the meaning of the Securities Act of 1933. Nonetheless, an analysis of the case law to date quite strongly suggests that community solar interests are, in fact, securities. On the other hand, this Comment posits that the policy underlying securities regulations points in both directions, and therefore the classification of community solar interests as securities is not as airtight as some judges might think.

Notwithstanding this conclusion, the proliferation of community solar is still feasible if such projects can qualify for an exemption from the most onerous of the Securities and Exchange Commission’s requirements. This Comment explores four potential exemptions: Rules 504 and 506, the Intrastate Exemption, and the pending crowdfunding exemption. It concludes that, unfortunately, the uniqueness of the community solar model does not lend to easy categorization into any of these exemptions—which mainly target startup companies seeking funding from wealthy investors or from people with a preexisting relationship to the entrepreneur.

In summary, though implemented to protect unsophisticated investors, the practical effect of securities regulations is to exclude altogether those investors from myriad benign investment opportunities. While this tradeoff may be worthwhile in other contexts, the risks and rewards of a community solar project are simple, consistent, and obvious. Thus, while investors would benefit from securities laws’ antifraud provisions, the onerous registration and disclosure requirements are unnecessary and in fact detrimental in the community solar context—they largely work to prevent communities from having the

opportunity to invest in community solar at all. In light of these tensions, this Comment concludes that the additional layer of antifraud protection triggered by securities classification is probably beneficial for community investors. But only by coupling that securities characterization with an exemption from strict registration requirements can the federal government and states strike the proper balance in protecting community investors while also safeguarding their rights to purchase solar energy.

AUTHOR

Samantha C. Booth is a J.D. student at UCLA School of Law, 2014. She was a Senior Editor of *UCLA Law Review*, Volume 61.

Many thanks to Professors Stuart Biegel, Cara Horowitz, and Michael A. Woronoff for their invaluable guidance, and a special thanks to Patrick E. Murray for his counsel as well as to the *UCLA Law Review* Volume 61 members for their editing expertise.

TABLE OF CONTENTS

INTRODUCTION.....	762
I. WHY COMMUNITY SOLAR?.....	766
A. Toe to Toe: Community Versus Residential Solar.....	768
B. Community Solar Vis-à-vis the Centralized Generation Model	772
II. ARE COMMUNITY SOLAR PANELS SECURITIES?	778
A. Securities: The Legal Framework	779
B. Are Community Solar Shares Investment Contracts?	780
1. Green Pricing Could Allow Community Solar Projects to Avoid Classification as an Investment Contract Because It Negates a Reasonable Expectation of Profit.....	783
2. Community Solar Interests May Not Qualify as Investment Contracts if the Benefits of Such Projects Accrue Predominantly From Factors Other Than the Efforts of Third Parties.....	784
III. LOOKING FOR LOOPHOLES: POTENTIAL EXEMPTIONS TO THE FEDERAL REGISTRATION REQUIREMENT	787
A. The Regulation D Safe Harbor: Offerings up to \$1 Million and Private Placements.....	788
1. Rule 506: The Private Placement Exemption	789
2. Rule 504: The Small Offering Exemption	794
B. Section 3(a)(11): The Intrastate Offering Exemption	796
C. Crowdfunding: Potential Exemption for Small Online Contributions	798
IV. HONESTY IS THE BEST POLICY: WHY ANTIFRAUD PROVISIONS ARE SUFFICIENT TO PROTECT COMMUNITY SOLAR INVESTORS	801
V. MEET THE PROJECTS.....	806
CONCLUSION	810

INTRODUCTION

A fledgling industry just ten years ago, the solar energy sector has exploded worldwide and is now poised to challenge the traditional paradigm of U.S. energy policy. While global financial markets were reeling under the most severe economic downturn in decades, solar photovoltaic (PV)¹ markets were experiencing record rates of growth.² In fact, the global installed capacity of solar PV—the technology used on solar panels and commonly associated with rooftop installations—*quadrupled* from twenty-four gigawatts (GW) in 2009 to over one-hundred GW in 2012.³ In layman's terms, that means the current level of production is sufficient to meet the energy needs of over thirty-million households.⁴ The United States' residential PV growth trajectory has mirrored global rates.⁵ Bolstered by congressional efforts such as the Energy Policy Act of 2005—which encouraged small-scale residential and commercial solar development by implementing a federal tax credit for onsite PV installations⁶—the United States has

-
1. “Photovoltaic (PV) devices generate electricity directly from sunlight via an electronic process that occurs naturally in certain types of material, called semiconductors. Electrons in these materials are freed by solar energy and can be induced to travel through an electrical circuit, powering electrical devices or sending electricity to the grid.” *Photovoltaic (Solar Electric)*, SOLAR ENERGY INDUSTRIES ASS'N, <http://www.seia.org/policy/solar-technology/photovoltaic-solar-electric> (last visited Jan. 6, 2014).
 2. See GAËTAN MASSON ET AL., EUR. PHOTOVOLTAIC INDUS. ASS'N, GLOBAL MARKET OUTLOOK FOR PHOTOVOLTAICS 2013–2017, at 13 (2012), http://www.epia.org/fileadmin/user_upload/Publications/GMO_2013_-_Final_PDF.pdf (“At the end of 2009, the world's cumulative installed PV capacity was approaching 24 GW. One year later it was 40.7 GW and at the end of 2011 it was 71.1 GW.”).
 3. See *id.*; see also James Murray, *Global Solar PV Market Surges Towards 100 GW Milestone*, BUSINESSGREEN (Apr. 10, 2013), <http://www.businessgreen.com/bg/news/2260477/global-solar-pv-market-surges-towards-100gw-milestone>.
 4. MASSON ET AL., *supra* note 2, at 13.
 5. See BRETT T. GAGE & RICK BORRY, PRINCIPAL SOLAR INST., TECHNOLOGICAL NICHES: CONCENTRATED SOLAR THERMAL VS. PHOTOVOLTAIC SOLAR 10 (2012), http://www.principalsolarinstitute.org/uploads/custom/3/_documents/CSvsPV_WhitePaper.pdf (charting the exponential increase in grid-connected PV solar in the residential sector from 2001 to 2010). Notably, however, PV growth has been slower in the United States than in some countries. For example, Germany's installed PV growth rate was four times that of the United States between 2010 and 2011. See GAËTAN MASSON ET AL., EUR. PHOTOVOLTAIC INDUS. ASS'N, GLOBAL MARKET OUTLOOK FOR PHOTOVOLTAICS UNTIL 2016, at 14–15 (2012), http://www.epia.org/fileadmin/user_upload/Publications/Global-Market-Outlook-2016.pdf.
 6. 26 U.S.C. § 25D (2012). Congress also expanded the scope of residential tax credits through subsequent legislation. See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115; Energy Improvement and Extension Act of 2008, Pub. L. No. 110-343, 122 Stat. 3807. Furthermore, Congress has sought to incentivize localized solar development by businesses by providing an analogous tax credit for small- and medium-scale commercial installations. See 26 U.S.C. § 48; see also *Residential Renewable Energy Tax Credit*, DATABASE ST. INCENTIVES FOR

currently installed 10.25 GW of solar capacity, enough to power approximately 1.7 million households.⁷ While such progress is impressive, U.S. energy policy has a long way to go. The U.S. Department of Energy (DOE) has determined that the optimal market share for solar energy in the United States is 10 to 25 percent of the national energy supply,⁸ yet solar generation currently supplies less than 1 percent of the nation's energy consumption, with solar PV technologies reflecting an even smaller fraction.⁹

Furthermore, this trend toward local generation represents a sharp deviation from the United States' traditional model of energy generation. Under the traditional model, energy is produced in industrial-sized, remote facilities and distributed to consumers via a transcontinental web of power lines.¹⁰ This centralized, utility-scale model has remained consistent over the past fifty years as the United States has diversified its resource portfolio to include, for example, nuclear, natural gas, and hydropower.¹¹ Yet unlike these prior technological advancements, the rise of solar PV has precipitated a shift toward localized energy generation. To most consumers, this shift is most salient from the rising popularity of residential rooftop PV systems. Unfortunately, the evolution of localized solar has far outpaced the U.S. Congress's ability to harmonize legal frameworks with optimal outcomes for U.S. energy policy. For example, home ownership (or, alternatively, the ability to expend multimillions to invest in remote, utility-scale projects) was a prerequisite to access to solar energy until very recently—and still remains a necessity in many states.¹²

RENEWABLES & EFFICIENCY, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US37F (last updated Dec. 11, 2012).

7. *Solar Industry Data*, SOLAR ENERGY INDUSTRIES ASS'N, <http://www.seia.org/research-resources/solar-industry-data> (last visited Jan. 6, 2014).
8. *Id.*
9. *Renewable Energy Sources in the United States: Solar Power*, NATIONALATLAS.GOV, http://nationalatlas.gov/articles/people/a_energy.html (last updated Jan. 14, 2013); *see also Solar*, INST. FOR ENERGY RES., <http://www.instituteforenergyresearch.org/energy-overview/solar> (last visited Jan. 6, 2014) ("Today, solar energy provides two-tenths of 1 percent of the total energy *consumed* in the United States . . . [and] solar electricity capacity . . . only accounts for 0.1 [percent] of net electricity *generated* in the United States . . ." (emphases added)). *See infra* notes 57–64 and accompanying text for a comparison of two competing solar technologies: PV versus concentrating solar power (CSP) (the primary technology used in centralized, industrial-scale solar generation).
10. *See* AL WEINRUB, COMMUNITY POWER: DECENTRALIZED RENEWABLE ENERGY IN CALIFORNIA 3–4, 37 (2010), http://www.clean-coalition.org/site/wp-content/uploads/2012/11/CommunityPowerPublication_Online.pdf ("Another factor at play . . . in creating pressure for centralized rather than decentralized power generation is the legacy model that has dominated electric power production for the last half century.").
11. *See id.* at 37 ("Fossil fuel, nuclear, and hydropower generation have favored large-scale power plants and a transmission and distribution infrastructure appropriate to a central-station generating model."); *see also infra* note 13 and notes 73–75 and accompanying text.
12. Namely, those that have not adopted community solar legislation.

But a new solar financing model is changing that paradigm. That model is community solar. By allowing anyone—not just homeowners and corporations¹³—to invest in solar energy, community solar can most effectively and equitably harness the market potential of solar PV and achieve the DOE’s goal of 10 to 25 percent market penetration. Like residential solar, community solar is a form of localized, or “distributed,”¹⁴ solar. Unlike residential solar, however, community solar offers ratepayers the opportunity to jointly lease or own a single, offsite¹⁵ PV installation, thus eliminating the need for homeownership.¹⁶ In return for their investment, participating ratepayers receive bill credits from the local utility company that reduce or entirely offset the ratepayers’ monthly energy bills under a system called virtual net metering.¹⁷ Such bill credits are calculated based on two sources of revenue flowing from the PV system: First, the system produces electricity that a third party—usually the local utility—is contractually obligated to purchase at a set price; second, the system produces numerous environmental benefits, such as reduced greenhouse emissions,¹⁸ that are bundled together into a legal fiction called renewable energy credits (RECs) and sold.¹⁹ These revenues

-
13. Many large corporations have been the primary beneficiaries of government subsidies and investment in solar energy. Such corporations include BP, Google, and Chevron. *See infra* note 75. Relatedly, the top commercial customers of solar PV in the United States, in order of capacity, include Walmart, Costco, Kohl’s Department Stores, and IKEA. *See Solar Means Business: Top Commercial Solar Customers in the U.S.*, SOLAR ENERGY INDUSTRIES ASS’N, <http://www.seia.org/research-resources/solar-means-business-top-commercial-solar-customers-us> (last updated Nov. 2012); *see also* Craig Rubens, *Google, BP, Investors Fund BrightSource for \$115M*, GIGAOM (May 14, 2008, 7:18 AM), <http://gigaom.com/cleantech/google-bp-investors-fund-brightsource-for-115m>.
 14. The term “distributed solar” simply refers to the proliferation of small- or medium-sized projects that generate energy close to the point of use, such as in urban areas. *See Learning About Renewable Energy: Distributed Energy Basics*, NAT’L RENEWABLE ENERGY LABORATORY, http://www.nrel.gov/learning/eds_distributed_energy.html (last updated Dec. 3, 2012). Distributed solar can be contrasted with centralized, utility-scale generation.
 15. In contrast to residential PV, which necessarily involves an *onsite* system.
 16. *See* JASON COUGHLIN ET AL., NAT’L RENEWABLE ENERGY LAB., *A GUIDE TO COMMUNITY SOLAR: UTILITY, PRIVATE, AND NON-PROFIT PROJECT DEVELOPMENT 2-3* (2010), <http://www.nrel.gov/docs/fy11osti/49930.pdf>.
 17. Virtual net metering is a “means for distributing economic benefits from a shared solar energy system.” *Id.* at 23. Energy generated by the solar project is fed onto the grid to offset general demand, and customers participating in the community solar project then receive bill credits in recognition of the value of this electricity. *Id.*
 18. *Id.* at 3.
 19. A “renewable energy credit” (REC)—also called a “renewable energy certificate”—is a metric that represents the bundle of “collective environmental benefits, such as avoided mercury, CO₂, and other environmentally harmful pollutants, [that] result [from] generating one megawatt-hour (MWh) of renewable energy” as opposed to equivalent conventional energy production. *Id.* These metrics are valuable and can be sold to help fund the community solar garden. *See id.*; *see also Renewable Energy Certificates (RECs)*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/greenpower/gpmarket/rec.htm> (last updated Oct. 16, 2012) (defining an REC as “the property rights to the environmental, social, and other nonpower qualities of renewable electricity

are then distributed among participating ratepayers in proportion to each individual's percentage ownership in the solar project.²⁰ Community solar thus offers a hybrid between the traditional centralized model and the newer, small-scale residential model of energy generation. Like the centralized model, community solar is an offsite system that capitalizes on economies of scale. Similar to the residential model, however, community solar projects are relatively small and are located close to the point of use.

The nascent community solar model also illustrates the rising tension between current legal frameworks and shifting paradigms of both energy generation and investor protection. Although community solar projects have started to crop up in scattered communities across the United States,²¹ the perpetuation of numerous state and federal legal barriers prevents widespread proliferation of this innovative model.²² This Comment proposes that federal securities regulations are incompatible with the community solar model and therefore present perhaps the most formidable—and the most overlooked—obstacle to its success. Securities compliance imposes onerous and prohibitively expensive registration requirements on issuers of securities. Although motivated by the laudable goal of investor protection, these regulations were promulgated before the emergence of the novel community solar model. In this context, subjecting community solar projects to onerous regulation by the U.S. Securities and Exchange Commission (SEC) does not further the principles underlying securities laws. This Comment

generation. A REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source”).

20. COUGHLIN ET AL., *supra* note 16, at 8.

21. *See, e.g.*, JOHN FARRELL, INST. FOR LOCAL SELF-RELIANCE, COMMUNITY SOLAR POWER: OBSTACLES AND OPPORTUNITIES 5–30 (rev. ed. 2010), <http://www.ilsr.org/community-solar-power-obstacles-and-opportunities> [hereinafter FARRELL, COMMUNITY SOLAR POWER] (surveying community solar projects in Colorado, Florida, Maryland, North Carolina, Oregon, Utah, and Washington); Connie Zheng, *Sacramento Offers Solar Shares for Renters*, GETSOLAR.COM (Mar. 16, 2010), <http://www.getsolar.com/blog/sacramento-offers-solar-shares-for-renters/4522> (describing Sacramento's SolarShares program, under which the Sacramento Municipal Utility District allows ratepayers to pay a premium to “lease” rights to energy generated from a utility-run community solar project).

22. In addition to the federal securities issues discussed herein, the adoption of favorable state legislation is often a prerequisite to the proliferation of community solar in any given state because such legislation establishes virtual net metering, imposes a legal requirement on utilities to purchase energy generated from community solar projects, sets the price to be paid for such energy while ensuring compliance with the Federal Energy Regulatory Commission (FERC) and the Public Utility Regulatory Policies Act's (PURPA) ratepayer indifference requirement, and exempts the community solar project from state securities laws and regulation as a “utility.” *See generally* Samantha Booth, *Community Solar: Reviving California's Commitment to a Bright Energy Future*, 43 ENVTL. L. REP. 10,585 (2013) (exploring the demise of California's proposed community solar bill—S.B. 843—and the various state legal and institutional barriers to the adoption of a private, special purpose entity model of community solar in California).

therefore explores whether and how community solar fits into this securities framework and explains how current laws could be amended to balance the goals of protecting investors and increasing equitable access to renewable energy generation.

To provide a background for this proposed regulatory change, Part I illustrates the relative advantages of community solar over both industrial-scale and residential solar systems. After establishing the clear superiority of community solar model, Part II considers whether community solar shares qualify as securities for the purpose of federal securities laws. This Part also explains the ramifications of the highly likely finding that community solar interests are securities. Part III explores three current exemptions and one pending exemption to federal securities laws and the problematic legal obstacles that a community solar project will confront in trying to fit within any one of these molds. Intertwined in this discussion are suggestions of minor changes that state or federal officials could initiate to accommodate community solar projects within these exemptions without compromising policy goals. Part IV proposes that the ideal framework for balancing investor protection with investor access is a regulatory scheme that classifies community solar shares as “securities” but provides an exemption from the most stringent state and federal regulations. This Part further explains why such a framework achieves an optimal outcome from a policy perspective. Finally, Part V surveys various community solar projects throughout the United States, analyzes how successfully they have navigated federal securities laws, and identifies points of tension between current practices and federal laws.

I. WHY COMMUNITY SOLAR?

The community solar model offers a superior approach to harnessing solar power. Most prominently, community solar is the only model that addresses the severe market mismatch between consumer demand for renewable generation and the current lack of opportunity to purchase such energy. The vast majority of consumers favor greater reliance on renewable energy, and between 50 and 80 percent of consumers report a willingness to pay a *premium* for renewable energy if opportunities to purchase such energy were available.²³ The few community

23. See, e.g., MARK SINCLAIR, CLEAN ENERGY GRP. & LYN ROSOFF, SMARTPOWER, SMART SOLAR MARKETING STRATEGIES: CLEAN ENERGY STATE PROGRAM GUIDE 8, 20 (2009), <http://www.cleanegroup.org/assets/Uploads/2011Files/Reports/CEGSolarMarketingReportAugust2009.pdf> (citing a 2009 study); VESTAS, GLOBAL CONSUMER WIND STUDY 2012, at 5 (2012), <http://www.vestas.com/Files/Filer/EN/Energy%20Transparency/GlobalConsumer>

solar projects that do exist have sold out quickly—sometimes in less than an hour.²⁴ Thus, robust market demand for renewable energy, and specifically community solar, already exists.

Unfortunately, most of this demand has gone untapped. Utility-scale projects do not offer opportunities for ordinary consumer investment. Likewise, the percentage of residential rooftop space that meets the qualifications for a solar PV installation is surprisingly low; the DOE has determined that only 22 to 27 percent of rooftops are suitable.²⁵ This statistic reflects the fact that homeowners with structurally unsuitable, shaded, or northern-oriented rooftops or homeowners who are subject to restrictive neighborhood covenants are generally unable to enjoy the benefits of residential PV.²⁶ Notably, however, this focus on physical availability of residential rooftop area fails to consider legal and economic factors—such as lack of property ownership—that further limit residents' access to rooftop solar. Specifically, many potential solar energy consumers are renters or apartment or condominium owners—nearly 100 percent of whom are excluded from opportunities to purchase renewable energy.²⁷ Thus, the problem of a limited supply of suitable rooftop space is confounded by the distributive effects of consumer exclusion. The practical import of the current solar energy paradigm is that nearly all the economic, social, and psychological benefits of solar PV have accrued to homeowners with sufficient liquidity to invest in solar panels—namely, wealthier populations.²⁸ The disproportionate distribution of the

WindStudy2012_Oct.pdf (reporting the results of an international survey of over 24,000 consumers in over twenty countries, which indicated that 85 percent of consumers desire more renewable energy, 49 percent would be willing to pay more for products made with renewable energy, and 62 percent would be more willing to buy products from brands known to use wind generation); *Consumer Demand for Renewable Energy Is Growing*, WINDMADE, <http://www.windmade.org/for-companies/global-wind-study/consumer-demand-for-renewable-energy-is-growing.aspx> (last visited Jan. 6, 2014) (reporting that 71 percent of consumers favor imposing legal requirements on utility companies to supply a portion of their energy from renewable sources and that 49 percent reported a willingness to pay a premium for renewable energy).

24. See, e.g., Mark Jaffe, *Solar Gardens Set to Bloom in Unusual Places in Colorado*, DENVER POST, Aug. 30, 2012, http://www.denverpost.com/business/ci_21430989/solar-gardens-set-bloom-unusual-places-colorado (reporting the popularity of community solar in Colorado as evidenced by the fact that a Colorado project had received three times the number of applications that it could accept within half an hour of opening); Zheng, *supra* note 21 (reporting that Sacramento's SolarShares program had plans to expand after the first phase of its program sold out with 1000 ratepayers willing to pay a 9 percent premium for solar energy).

25. See PAUL DENHOLM & ROBERT MARGOLIS, NAT'L RENEWABLE ENERGY LAB., PUB. NO. NREL/TP-6A0-44073, SUPPLY CURVES FOR ROOFTOP SOLAR PV-GENERATED ELECTRICITY FOR THE UNITED STATES 4 (2008), <http://www.nrel.gov/docs/fy09osti/44073.pdf>.

26. COUGHLIN ET AL., *supra* note 16, at 2–3.

27. See *id.*

28. It must be noted, however, that the financial barrier to entry presented by high upfront installation costs has been largely eviscerated through the increasing availability of third-party financing. Nonetheless, access to solar generation remains skewed towards higher socioeconomic classes for two reasons. First, the availability of

benefits of—and access to—solar energy is particularly worrisome in parts of the country where home ownership rates hover around 50 percent, such as in California, New York, and the District of Columbia.²⁹

Thus, a primary benefit of community solar lies in its ability to meet high market demand for renewable energy, while simultaneously conferring the economic and social benefits of solar ownership to a broader swathe of middle- and even lower-income Americans. The remainder of this Part explores the myriad other benefits of community solar by contrasting it against the competing residential and centralized models of solar production.

A. Toe to Toe: Community Versus Residential Solar

The most glaring deficiency of the residential model is that an individual must own a home with a structurally suitable roof as a prerequisite to solar ownership. In addition to the fact that this condition excludes upwards of 75 percent of ratepayers,³⁰ this requirement also illustrates another drawback of residential solar—siting inflexibility. Community solar, on the other hand, encourages creative siting of solar projects, such as on landfills or otherwise blighted land,³¹ over parking lots,³² and on third-party roofs—such as schools³³ and

third-party financing is still contingent on home ownership. Second, the use of third-party financing significantly reduces the net economic benefit to the homeowner, as the homeowner must repay the third party for the cost of the system plus interest. For examples of third party financiers, see *Solar Financing PPA*, TIoga ENERGY, <http://www.tiogaenergy.com/tioga-energy-resource/other-solar-information/financing-solar-ppa> (last visited Jan. 6, 2014), promoting the benefits of solar financing power purchase agreements, including “[n]o expensive installation and servicing cost,” and *Solar Lease*, SOLARCITY, <http://www.solarcity.com/residential/solar-lease.aspx> (last visited Jan. 6, 2014), advertising “[f]ree [i]nallation.”

29. See *Home Ownership Rate by State: 2010*, DANTER, <http://www.danter.com/statistics/ho2010.pdf> (last visited Jan. 6, 2014) (reporting home ownership rates of 45.6 percent in the District of Columbia, 54.5 percent in New York, and 56.1 percent in both Hawaii and California).

30. See *supra* notes 27–29 and accompanying text.

31. See Andrew Wineke, *Solar Garden to Give New Life to Old Landfill*, GAZETTE, Dec. 20, 2011, <http://www.gazette.com/articles/old-130490-landfill-big.html> (praising the ingenuity of community solar developers for giving new life to otherwise unusable land); cf. NAT'L RENEWABLE ENERGY LAB., U.S. ENVTL. PROT. AGENCY, PUB. NO. NREL/TP-7A30-52615, BEST PRACTICES FOR SITING SOLAR PHOTOVOLTAICS ON MUNICIPAL SOLID WASTE LANDFILLS 5–8 (2013), <http://www.nrel.gov/docs/fy13osti/52615.pdf> (describing the best siting practices for solar development on landfills, including criteria a landfill must meet in order to be a suitable site, major solar system components and requirements, and landfill closure and postclosure care).

32. See, e.g., Jaffe, *supra* note 24 (describing a parking lot community solar installation); Seth Roffman, *Community Solar Development in New Mexico*, GREEN FIRE TIMES (Apr. 7, 2013, 1:13 AM), <http://greenfiredtimes.com/2013/04/community-solar-development-in-new-mexico/> (“Under [the community solar] model, members [can] buy solar panels located in arrays on the roofs of schools and carports in parking lots.”). For more details on parking lot solar power designs, see *Solar Parking Canopies*, SUNPOWER, <http://us.sunpowercorp.com/commercial/products-services/solar-parking/> (last visited Jan. 6, 2014).

33. See, e.g., John Laidler, *High School Could Go Solar: Official Says Town Would Save \$135K a Year on*

churches.³⁴ This siting flexibility can also convey ancillary benefits, such as shade in parking lots.³⁵ Similarly, the presence of solar panels on public buildings, like schools, can increase public awareness of clean energy, spur more community action, and confer educational benefits.³⁶

Community solar also offers substantial cost benefits over residential solar. These cost savings flow from multiple factors. First, unlike residential systems, community solar projects are able to sell RECs, which provide an additional source of revenue to offset the installation costs of the solar array.³⁷ Second, community solar projects can exploit additional tax benefits that are available to businesses but not to individuals. Specifically, Modified Accelerated Cost-Recovery System (MACRS)³⁸ and bonus depreciation³⁹ offer potential cost savings. These provisions allow businesses (but not individuals) to fully depreciate the costs of a solar array in just five years. The community investor or the developer can then use these depreciation expenses to offset other gains, subject to complex passive income limitations.⁴⁰ These tax losses can also be sold to

Power, BOS. GLOBE, May 12, 2013, <http://www.bostonglobe.com/metro/regionals/north/2013/05/11/burlington-looks-install-solar-roof-high-school/824FwmPUXguiiFymGVje5O/story.html>; *Schools Can Participate in Community Solar*, SRP, <http://www.srpnet.com/environment/communitysolar/schools.aspx> (last visited Jan. 6, 2014) (offering schools the opportunity to install solar photovoltaic energy panels on rooftops); Maks Goldenshteyn, *State's Largest Community Solar Project Goes Online in March in Poughkeepsie*, KITSAP SUN (Feb. 7, 2011, 5:33 PM), <http://www.kitsapsun.com/news/2011/feb/07/states-largest-community-solar-project-goes-in> (describing a community solar project funded by sixteen private investors that was built on the roof of—and that sold energy produced to—a local school).

34. See, e.g., Varun Saxena, *University Park Community Solar LLC Makes Solar Economical*, EXAMINER.COM (Oct. 12, 2012), <http://www.examiner.com/article/university-park-solar-llc-makes-solar-power-economical-1> (describing a community solar project currently situated on University Park's Church of the Brethren and funded by a consortium of local residents).
35. See *Solar Parking Canopies*, *supra* note 32 (showing pictures of solar canopy designs for use over parking lots).
36. See Laidler, *supra* note 33 (quoting a school superintendent, who said the following about the prospective benefits of a solar installation on a local high school: "We are always looking at educational opportunities If a building can . . . become part of a learning environment, then it benefits everybody" (second alteration in original) (internal quotation marks omitted)).
37. Recall that an REC is a metric that "represents the property rights to the environmental, social, and other nonpower qualities of renewable electricity generation. An REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source." *Renewable Energy Certificates*, *supra* note 19. For a description of RECs, see *id.*, *supra* note 19 and accompanying text.
38. I.R.C. § 168(l)(1) (2012) (setting forth an accelerated-depreciation-deduction schedule under which the entire cost of a solar system can be depreciated in the first five years, even though actual system life falls between twenty-five and forty years).
39. *Id.* § 168(k)(4)(A)–(B) (providing for additional acceleration of a project's depreciation schedule by allowing a business to depreciate 50 percent of project costs in the first year alone).
40. A passive investor is one who does not "materially participate" in the business. *Id.* § 469(c)(1)(A)–(B). A taxpayer materially participates only if the taxpayer is "involved in the operations of the

institutional, tax-motivated investors and used to offset those investors' other gains.⁴¹ Third, the relatively large size of community solar projects renders them better able to exploit economies of scale. The national average residential installation in 2010 grew to 5.7 kilowatts (kW) of installed capacity,⁴² but systems easily range from 3 to 7 kW depending on household roof size and climate.⁴³ The average community solar project is substantially larger, although the size of such projects ranges considerably. On the smallest end of the scale, University Park Solar's neighborhood rooftop installation consists of a 22 kW system.⁴⁴ On the larger end, Sacramento Municipal Utility District's (SMUD's) SolarShares program boasts a 1 megawatt (MW) solar array (equivalent to 1000 kW).⁴⁵

The combination of these three factors results in substantial cost savings. For example, in 2010, Colorado's Clean Energy Collective (CEC) constructed Colorado's first community solar project, a 77.7 kW system with a buy-in price of \$3.15 per watt.⁴⁶ Earlier that same year, Maryland's University Park Solar was

activity on a . . . regular[,] . . . continuous, and . . . substantial" basis. *Id.* § 469(h)(1)(A)–(C). When an individual is classified as a passive investor in a given investment, any losses flowing from that investment are also classified as "passive losses." *Id.* § 469(e)(2). Passive losses can be used only to offset "passive gains," which the Internal Revenue Service has defined very narrowly to include only rental income and income from other passive investments. *Id.* §§ 469(c)(2), (d)(1). The effect of this rule is that passive losses are worthless for the vast majority of individuals because most individuals do not have sufficient passive income against which to use the losses. In the community solar context, nearly all community investors—except the most active founders or developers—will be classified as passive investors for the purpose of Modified Accelerated Cost-Recovery System (MACRS) and bonus depreciation benefits; thus most community solar investors are unable to use the tax losses generated by these generous depreciation schedules.

41. Fortunately, creative solutions have emerged in which a community solar project partners with an institutional, tax-motivated investor who is able to use the depreciation against other income. In this way, both parties can benefit from tax advantages while complying with passive income rules. For example, under a so-called flip structure model, the tax-motivated investor purchases the community solar project and holds it until all depreciation benefits have been exhausted (five years). The parties' agreement then further provides that system ownership "flips" back to the community investors upon exhaustion of the benefits. The effect of this arrangement is that the tax-motivated investor purchases the depreciation benefits at a discount. Thus, the community investors and the tax-motivated investor essentially split the financial benefit of MACRS and bonus depreciation. *See* COUGHLIN ET AL., *supra* note 16, at 15, 28.
42. *See* LARRY SHERWOOD, INTERSTATE RENEWABLE ENERGY COUNCIL, U.S. SOLAR MARKET TRENDS 2010, at 7 (2011), <http://irecusa.org/wp-content/uploads/2011/06/IREC-Solar-Market-Trends-Report-June-2011-web.pdf>.
43. *Cost of Solar Power*, SUNRUN, <http://www.sunrunhome.com/solar-lease/cost-of-solar> (last visited Nov. 23, 2013).
44. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 9.
45. U.S. DEPT OF ENERGY, PUB. NO. DOE/GO-102011-3256, CHALLENGES AND SUCCESSES ON THE PATH TOWARD A SOLAR-POWERED COMMUNITY: SOLAR IN ACTION 5 (2011) ("SolarShares is a community solar program pioneered by SMUD in 2008. This program allows customers to purchase a portion of the solar energy generated by a 1-MW PV installation in Sacramento County.").
46. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 5.

able to achieve even greater cost savings, bringing the effective cost per watt after tax savings to \$2.27.⁴⁷ During this same period, the national average cost of a residential installation was around \$7.00 per watt.⁴⁸ Although the national average residential cost fell to \$6.10 per watt in 2011, a substantial per-watt cost disparity persists.⁴⁹ Moreover, with a national average system size of 5.7 kW, this translates into a national average project cost of around \$34,770 in 2011⁵⁰ and \$39,900 in 2010, assuming that average system size remained constant over the course of those two years.⁵¹

Conversely, community solar offers ratepayers the opportunity to maintain their per-watt savings while purchasing as little as a single solar “share.” To illustrate, the Colorado Clean Energy Collective permits consumers to purchase a single solar panel for as little as \$725, which can even be paid in installments. In return for this nominal initial investment, participating investors can offset their household energy use for the entire life of the solar array,⁵² which can range from twenty-five to forty years.⁵³ In short, community solar participants can enjoy the same benefits as the typical residential PV system owner but at a fraction of the cost, thus vastly expanding access to solar energy.

In addition to extremely low entry costs, participating community members enjoy reduced ongoing system-maintenance costs.⁵⁴ The cost of servicing one large project is substantially lower than the cumulative cost of maintaining scattered, smaller installations. Community solar also allows community investors

47. *Id.* at 9.

48. GALEN BARBOSE ET AL., LAWRENCE BERKELEY NAT'L LAB., PUB. NO. LBNL-5919E, TRACKING THE SUN V: AN HISTORICAL SUMMARY OF THE INSTALLED PRICE OF PHOTOVOLTAICS IN THE UNITED STATES FROM 1998 TO 2011, at 12 (2012), available at <http://emp.lbl.gov/sites/all/files/LBNL-5919e.pdf>.

49. *Id.* (noting that the average per-watt installation cost for a system smaller than 10 kW fell to \$6.10 in 2011).

50. \$6.10 (price per watt 2011) * 1000 = \$6100 (price per kW 2011). \$6100 * 5.7 (average kW system size (assumes same size as 2010)) = \$34,770. Notably, because average system size is rising, the actual average cost might be slightly higher.

51. \$7.00 (price per watt 2010) * 1000 = \$7000 (price per kW 2010). \$7000 * 5.7 (average kW system size in 2010) = \$39,900.

52. *Frequently Asked Questions*, CLEAN ENERGY COLLECTIVE, <http://www.easycleanenergy.com/faq.aspx> (last visited Jan. 6, 2014).

53. See Ken Zweibel, *Should Solar Photovoltaics Be Deployed Sooner Because of Long Operating Life at Low, Predictable Cost?*, 38 ENERGY POL'Y 7519, 7519 (2010) (“PV modules, the key components of [solar PV] systems, are warranted for 25 or more years, but no one actually knows how long they might last. Data on live modules now extends back 40 years. . . . PV systems are not designed for 100 year operation yet, but if an effort were made to do so, they might last that long.” (footnotes omitted) (citations omitted)).

54. See Eugene Buchanan, *Growing Solar*, HOME POWER, <https://homepower.com/articles/growing-solar/page/0/2> (last updated Dec. 19, 2011).

to avoid the hassle of maintaining their own individual systems.⁵⁵ The ease of system ownership may also reduce psychological barriers to entry as compared with a residential owner who must invest substantial time and resources into researching and hiring a developer, supervising system installation, and ensuring proper ongoing maintenance. Similarly, local utilities may be willing to pay more per watt for energy produced by a single (reliable) community solar array than for energy produced by numerous residential installations—each of which requires its own grid connection and may or may not be well maintained.⁵⁶

In summary, community solar offers numerous advantages over residential solar. By removing the requirement that the solar array be sited at the system owner's point of use, community solar provides substantial siting flexibility, which in turn can confer additional social benefits to the entire community. Furthermore, community solar significantly reduces the barriers to entry traditionally imposed by the residential model, most prominently by minimizing both per-watt and total investment costs. These reduced installation and maintenance costs also reduce psychological barriers to solar ownership.

B. Community Solar Vis-à-vis the Centralized Generation Model

This Comment has—until now—focused solely on solar PV technology, the technology used in solar panels. The solar market, however, is split between two competing technologies: solar PV and concentrating solar power (CSP) (also referred to as solar thermal power)⁵⁷—the technology used in most industrial-scale arrays, such as those developed in the Mohave Desert.⁵⁸ Admittedly, CSP has one advantage over PV technology—its superior ability to store electricity for use when the sun is not shining.⁵⁹ Even the DOE, however, admits that high

55. *See id.*

56. *See id.*

57. GAGE & BORRY, *supra* note 5, at 3 (“Much like the carbon combustion processes used in fossil fuel based generation, concentrated solar thermal applications use steam-powered generators to transform heat energy into electricity.”). For more detail regarding the main types of CSP and PV technologies, see generally *Solar Technologies*, RENEWABLE ENERGY IN THE CAL. DESERT, <http://webservices.itcs.umich.edu/drupal/recd/?q=node/154> (last visited Jan. 6, 2014).

58. U.S. DEPT OF ENERGY, SOLAR ENERGY TECHNOLOGIES PROGRAM: MULTI-YEAR PROGRAM PLAN 2008–2012, at 8 (2008), http://www1.eere.energy.gov/solar/pdfs/solar_program_mypp_2008-2012.pdf.

59. *See Solar Beyond Grid Parity: Spectrum-Efficient Solar Energy for Dispatchable Electricity or Fuels Workshop*, ADVANCED RES. PROJECTS AGENCY-U.S. DEPT ENERGY, <http://arpa-e.energy.gov/?q=arpa-e-events/solar-beyond-grid-parity-spectrum-efficient-solar-energy-dispatchable-electricity-or> (last visited Jan. 6, 2014).

storage costs and the ability to rely on nonsolar sources during cloudy days and at night undercut this benefit.⁶⁰

Meanwhile, the relative advantages of PV are numerous. While CSP technologies are suitable only for large-scale, ground-mounted solar arrays, PV can be installed in both urban and rural areas and can be used for both single-panel residential projects as well as for industrial-scale desert installations.⁶¹ Thus, solar PV is more versatile and adaptable.⁶² In addition, PV is less expensive on a per-watt basis than CSP.⁶³ In fact, PV has been more cost effective than CSP since at least 2005.⁶⁴

The plummeting cost of PV since 2009 only strengthens this second advantage. With rapidly increasing global reliance on PV generation,⁶⁵ the cost of solar PV has become more competitive than most U.S. consumers—or government officials for that matter—realize. In the last two years, *Forbes*, *Bloomberg New Energy Finance*, and *Renewable Energy* announced that the cost of PV had fallen by 50 percent between 2008 and 2009 and by another 75 percent between 2009 and 2012.⁶⁶ Moreover, these cascading costs are poised to intersect with rising residential electricity rates in the United States' forty largest cities

60. See *id.* (“Although concentrating solar power (CSP) can provide storage, it is not clear that simply collecting and storing heat for later use is the optimum approach to provide baseload or peak-shifted solar electricity.”).

61. GAGE & BORRY, *supra* note 5, at 9 (“Photovoltaic solar applications are highly adaptable [They] can be applied to nearly any energy requirement—from small, standalone panels to utility scale fields where thousands of panels are strung together to produce megawatts of electricity.”).

62. *Id.*

63. See John Farrell, *Busting 4 Myths About Solar PV vs. Concentrating Solar*, GRIST (Feb. 18, 2011, 12:02 AM), <http://grist.org/solar-power/2011-02-15-busting-4-myths-about-solar-pv-v-concentrating-solar> (“A concentrating solar power plant has a capital cost of \$5.50 per watt without storage, and \$7.75 per watt with six hours of thermal storage. . . . In contrast, a distributed solar PV plant has a capital cost of \$3.80 per watt without storage and can add battery storage for \$0.50 per watt.”).

64. See JON CREYTS ET AL., MCKINSEY & CO., REDUCING U.S. GREENHOUSE GAS EMISSIONS: HOW MUCH AT WHAT COST?, at xiii (2007) (comparing the cost of distributed solar PV to centralized solar CSP). Notably, McKinsey & Company is broadly recognized as one of the top three management consulting firms in the nation.

65. See *supra* notes 2–4 and accompanying text.

66. Morgan Bazilian et al., *Re-considering the Economics of Photovoltaic Power*, 53 RENEWABLE ENERGY 329, 332 (2013); Justin Gerdes, *Solar Power More Competitive Than Decision-Makers or Consumers Realize*, FORBES, May 24, 2012, <http://www.forbes.com/sites/justingerdes/2012/05/24/solar-power-more-competitive-than-decision-makers-or-consumers-realize> (reporting that the falling costs of PV modules have “quickly upended what had been conventional wisdom (i.e., solar power is prohibitively expensive)” and that “the new economics of solar power [have] caught decision-makers flat-footed”); Press Release, Bloomberg New Energy Fin., Research Paper Shines Light on Competitiveness of Solar PV Power (May 16, 2012), *available at* <https://www.bnef.com/PressReleases/view/216>.

within the next ten years.⁶⁷ In fact, in sunny areas, such as Hawaii and California, or in areas with high electricity rates, such as San Diego and New York City, those trajectories have already collided.⁶⁸ That is, energy parity has already been achieved in these markets, and the *unsubsidized* cost of solar PV is roughly equivalent to the cost of non-renewably generated electricity.⁶⁹ This means that when combined with government incentives, solar PV has actually been able to undercut the price of nonrenewable energy on the open market. For example, in February 2013, New Mexico's First Solar Inc. reportedly sold solar energy to a local New Mexico utility at almost half the price that the utility would otherwise have had to pay for energy generated from coal.⁷⁰

Thus, a key advantage of community solar lies in its ability to capitalize on the increasing cost competitiveness of solar PV. By expanding the market for solar PV to an additional 75 percent of currently excluded ratepayers,⁷¹ the community solar model is able to take advantage of these tumbling costs most effectively. Although the federal government has recognized these benefits to some degree—as demonstrated by The Energy Policy Act of 2005 and related legislation⁷²—the U.S. government continues to offer additional incentives only to industrial-scale projects.⁷³ For example, the federal government has au-

67. JOHN FARRELL, INST. FOR LOCAL SELF-RELIANCE, ROOFTOP REVOLUTION: CHANGING EVERYTHING WITH COST-EFFECTIVE LOCAL SOLAR 3 & n.5 (2012), <http://www.ilsr.org/wp-content/uploads/2012/03/rooftop-revolution-ilsr.pdf> [hereinafter FARRELL, ROOFTOP REVOLUTION] (charting the trajectories of solar and traditional residential energy pricing based on statistics from the Energy Information Administration, the Lawrence Berkeley Laboratory's "Tracking the Sun" series, and the Bureau of Labor Services' electricity price index); see also *Map Projects When U.S. Cities Will Reach Solar Grid Parity*, YALE ENV'T 360 (Dec. 28, 2011), http://e360.yale.edu/slideshow/map_projects_when_us_cities_will_achieve_solar_grid_parity/43/1 ("If energy cost trends remain consistent, solar energy could become cheaper than power from the grid in most major U.S. metropolitan areas by 2027 . . .").

68. See FARRELL, ROOFTOP REVOLUTION, *supra* note 67, at 3 (stating that Hawaii has already reached solar grid parity); *id.* at 29–31 (explaining that under three separate metrics, solar grid parity has already been achieved, or will be achieved within a few years, in New York City and numerous California cities, including Los Angeles, Riverside, San Diego, San Francisco, and San Jose).

69. *Id.* at 3, 30–31.

70. Ehren Goossens & Christopher Martin, *First Solar May Sell Cheapest Solar Power, Less Than Coal*, BLOOMBERG (Feb. 1, 2013, 10:44 AM), <http://www.bloomberg.com/news/2013-02-01/first-solar-may-sell-cheapest-solar-power-less-than-coal.html>.

71. See *supra* notes 25–29 and accompanying text.

72. Congress expanded the scope of residential tax credits through the Energy Improvement and Extension Act of 2008, Pub. L. No. 110-343, 122 Stat. 3807, and the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115.

73. See, e.g., Amy Harder, *Government Races to Close Billions in Renewable Energy Loan Guarantees*, NAT'L J., Sept. 15, 2011, <http://www.nationaljournal.com/energy/government-races-to-close-billions-in-renewable-energy-loan-guarantees-20110915> (reporting that, as of September 2011, the Obama administration had issued over \$9 billion in renewable energy loan guarantees); cf. Booth, *supra* note 22, at 10,596 ("The availability of federal loan and other benefits to *only*

thorized more than \$10 billion in loan guarantees to manufacturing and large-scale renewable projects.⁷⁴ Such behavior is likely attributable to the inertia in favor of the traditional, centralized model that has been the hallmark of U.S. energy generation for decades.⁷⁵ Despite this competitive advantage, however, CSP's market share relative to PV is rapidly dwindling: Between 2006 and 2012, CSP's market share fell from nearly 40 percent to 10 percent.⁷⁶ These market dynamics further support a shift in favor of a model—like community solar—that utilizes PV as opposed to CSP technologies.

One could argue, however, that these statistics merely support a shift from centralized CSP generation to centralized PV generation. After all, it seems logical that utility-scale projects are best able to exploit economies of scale and are therefore most cost effective. Such a conclusion is fallacious, however, because it ignores other costs of centralized generation as well as the copious additional benefits conferred by localized generation. For instance, the cost of transmission

industrial solar projects effectively subsidizes central generation over distributed solar, making [localized] solar comparatively less attractive.”)

74. According to the Database of State Incentives for Renewable and Efficiency:

The loan guarantee program has been authorized to offer more than \$10 billion in loan guarantees for energy efficiency, renewable energy and advanced transmission and distribution projects.

The DOE actively promotes projects in three categories: (1) manufacturing projects, (2) stand-alone projects, and (3) large-scale integration projects that may combine multiple eligible renewable energy, energy efficiency and transmission technologies in accordance with a staged development scheme.

U.S. Department of Energy-Loan Guarantee Program, DATABASE ST. INCENTIVES FOR RENEWABLES & EFFICIENCY, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US48F&re=1&ee=1 (last updated May 8, 2012). The federal government's loan guarantee program was created by Section 1703 of Title XVII of the Energy Policy Act of 2005. *Id.*

75. See WEINRUB, *supra* note 10, at 37–38. Weinrub notes that:

The influence of [the traditional utility model] is also seen in the significant public subsidies provided to large remote central-station power projects:

. . . The federal government provides enormous loans to private, for-profit consortiums. For example, in February 2010, it was announced that BrightSource Energy's 400-megawatt Ivanpah solar thermal project in the Mojave Desert received a \$1.37 billion loan “guarantee” from the Department of Energy [and a loan from the U.S. Treasury] . . . BrightSource investors include BP, Chevron, Morgan Stanley, and Google.

Id. at 38 (footnotes omitted) (citing *BrightSource Gets \$1.37 Bln DOE Loan Guarantee for Ivanpah Project, Whoa!*, GREEN ENERGY REP., <http://greenenergyreporter.com/2010/02/brightsource-gets-1-37-blm-doe-loan-guarantee-for-ivanpah-project-whoa/> (last visited Jan. 6, 2014); David R. Baker, *Fed Guarantee Helps BrightSource Energy Plan*, S.F. GATE (Feb. 23, 2010, 4:00 AM), http://articles.sfgate.com/2010-02-23/business/17951804_1_renewable-energy-loan-guarantees-california-energy-commission); see also *supra* notes 10–11 and accompanying text.

76. GAGE & BORRY, *supra* note 5, at 12.

infrastructure in the United States is currently skyrocketing.⁷⁷ In fact, 70 percent of our nation's transmission lines are at least twenty-five years old, and 60 percent of circuit breakers are more than thirty years old.⁷⁸ The costs of maintaining and expanding this infrastructure are astronomical. For example, California alone estimated that it will spend \$16 billion on new power lines between 2005 and 2020.⁷⁹ Likewise, privately owned utilities spent an estimated \$28 billion on electric transmission infrastructure between 2004 and 2008.⁸⁰ This figure does not include amounts spent by publicly owned utilities.⁸¹ Thus, reported costs of centralized generation are deceptively low, as they do not reflect these substantial transmission costs. Moreover, any economies of scale are diminished by the fact that 7 percent of the energy generated under the centralized model is lost through the transmission and distribution process.⁸²

Conversely, community solar requires virtually no transmission infrastructure as solar arrays are located at or near the point of use.⁸³ Thus, increasing the market penetration of localized solar from less than 1 percent to 25 percent—as recommended by the DOE⁸⁴—would offset billions in unnecessary transmission and distribution costs. By expanding the accessibility of solar energy, community solar offers the means to achieve this dramatic increase.

The centralized model of generation and its associated transmission lines are problematic not only from a cost perspective but also from an environmental

77. See William Pentland, *Perverse Economics of the Electric Grid: As Generation Gets Cheaper, Transmission Costs Soar*, FORBES, Jan. 2, 2013, <http://www.forbes.com/sites/williampentland/2013/01/02/the-perverse-economics-of-the-electric-grid>.

78. GLOBAL ENV'T FUND & CTR. FOR SMART ENERGY, THE EMERGING SMART GRID: INVESTMENT AND ENTREPRENEURIAL POTENTIAL IN THE ELECTRIC POWER GRID OF THE FUTURE 9 (2005), available at http://www.smartgridnews.com/artman/uploads/1/sgnr_2007_0801.pdf.

79. CAL. PUB. UTILS. COMM'N, 33% RENEWABLES PORTFOLIO STANDARD: IMPLEMENTATION ANALYSIS PRELIMINARY RESULTS 62 (2009), <http://docs.cpuc.ca.gov/PUBLISHED/GRAPHICS/102354.PDF>.

80. EDISON ELEC. INST., EEI SURVEY OF TRANSMISSION INVESTMENT: HISTORICAL AND PLANNED CAPITAL EXPENDITURES (1999–2008), at 5–6 (2005), http://www.eei.org/ourissues/ElectricityTransmission/Documents/Trans_Survey_Web.pdf.

81. This report surveyed only privately held utility providers. See generally *id.*

82. *Frequently Asked Questions: How Much Electricity Is Lost in Transmission and Distribution in the United States?*, U.S. ENERGY INFO. ADMIN., <http://www.eia.gov/tools/faqs/faq.cfm?id=105&t=3> (last updated July 9, 2012).

83. By definition, community solar connotes projects that are located in the communities they serve—and thus close to the point of use. A community solar project is located *at* the point of use when the solar array is installed on the energy user's rooftop—such as when a school or a church purchases energy produced by the project. A community solar project that feeds the energy it produces onto the grid for consumption by the community in which it is situated is located *near* the point of use and will require some—though minimal—local distribution infrastructure.

84. See *supra* text accompanying note 8.

perspective. Transmission lines leak hexafluoride (SF₆), a greenhouse gas that is used as an electrical insulator and that possesses 23,900 times the global warming capacity of carbon dioxide.⁸⁵ Thus, the construction of new transmission infrastructure in order to bring power generated at distant solar power plants is at least somewhat counterproductive. Another more obvious environmental detriment of centralized solar is the necessity of “scraping” previously undisturbed lands in sensitive desert habitats in order to situate new projects and power lines.⁸⁶ Incidentally, the costs associated with lengthy project review procedures, voluminous environmental impact reports, and accompanying lawsuits are also exorbitant.⁸⁷ Unlike centralized generation, however, community solar projects are situated predominantly on developed—or even blighted—land.⁸⁸ Thus, community solar effectively circumvents these environmental detriments and their associated costs.

Likewise, community solar offers benefits in the form of superior deployment potential and protection against energy shortages and market manipulations. A community solar project can be developed and grid connected in a matter of months; in contrast, a centralized project may take up to ten years to complete.⁸⁹ Moreover, unlike other sources of energy, nearly all the costs associated with solar PV are expended in connection with the initial installation of the solar system. Therefore, once the project is developed, it serves as a hedge against rising prices and shortages of other commodities, such as coal and natural gas. Community solar also provides a related benefit: increased energy security. The presence of numerous, decentralized projects throughout suburban and urban areas decreases the risk of disruptions to local power supplies and could be designed to serve as a backup power supply in the event of emergencies or natural disasters.⁹⁰

Lastly, the shift from the importation of energy to the self-generation of energy has a positive effect on the local community. In addition to raising community awareness of general energy efficiency, decentralized solar promotes

85. *SF₆ Emission Reduction Partnership for Electric Power Systems*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/highwep/electricpower-sf6/basic.html> (last updated Sept. 21, 2012).

86. WEINRUB, *supra* note 10, at 24; *see also* The Alliance for Responsible Energy Policy (AREP), *The Better Way*, DESERT REP., Dec. 2008, at 10, 22, *available at* http://www.desertreport.org/wp-content/uploads/2008/12/DR_Winter2008.pdf.

87. *Cf.* WEINRUB, *supra* note 10, at 25–29 (criticizing the federal government’s attempts to “fast-track” centralized solar development in sensitive desert environments, projects that would otherwise take up to ten years to develop).

88. *See supra* notes 31–36 for a discussion of the extraordinary flexibility of community solar siting.

89. WEINRUB, *supra* note 10, at 28–29.

90. *Id.* at 31.

local job growth. The United States is home to 5600 solar energy companies,⁹¹ and the PV sector alone provided 100,237 jobs in 2011, with an anticipated increase of almost 24 percent throughout 2012.⁹² From 2010 to 2011, the rate of job growth in the solar PV sector was nearly ten times the national average rate of growth.⁹³ It is also notable that the United States “leads the world in venture capital funding and patent activity for solar technologies.”⁹⁴ In fact, PV-sector jobs include a wide array of opportunities, including installation, manufacturing, sales and distribution, and engineering jobs, as well as high-tech and entrepreneurial positions.⁹⁵

In short, community solar conveys a variety of benefits over centralized solar generation. Community solar more effectively harnesses the market potential of PV technologies, reduces reliance on the nation’s aging transmission infrastructure, avoids severe environmental impacts and related costs, and creates local jobs. Of course, centralized solar generation may have its place. Not only is it clearly superior to nonrenewable generation, but the ability to store solar energy could prove valuable if storage costs become more economical. But the pursuit of centralized solar should not come at the cost of community solar. This is especially true because widespread penetration of community solar would not require the billions in federal loan guarantees currently expended on CSP projects—rather, it would merely require the modernization of antiquated securities regulations.

II. ARE COMMUNITY SOLAR PANELS SECURITIES?

Securities regulations pose perhaps the most formidable obstacle to large-scale adoption of community solar in the United States. If community solar “shares”—as I refer to them for the purpose of this Comment—are classified as securities, then the sale and purchase of those shares is strictly regulated by the SEC: Any offerings must either be registered or exempted from registration. Although some authorities point in the opposite direction, a court is very likely to

91. *U.S. Solar Market Grows 76% in 2012; Now an Increasingly-Competitive Energy Source for Millions of Americans Today*, SOLAR ENERGY INDUSTRIES ASS’N (Mar. 14, 2013), <http://www.seia.org/news/us-solar-market-grows-76-2012-now-increasingly-competitive-energy-source-millions-americans>.

92. THE SOLAR FOUND., NATIONAL SOLAR JOBS CENSUS 2011: A REVIEW OF THE U.S. SOLAR WORKFORCE 4 (2011), http://www.thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF_JobsCensus2011_Final_Compressed.pdf.

93. *See id.* at 11 (asserting that the 100,237 workers employed in the solar PV sector “represent[ed] an overall growth rate of 6.8% over the past year, nearly 10 times higher than the national average employment growth rate of 0.7%”).

94. SEMICONDUCTOR EQUIP. & MATERIALS INT’L & PV GRP., MANUFACTURING SOLAR PHOTOVOLTAIC PRODUCTS IN THE UNITED STATES: STATUS AND RECOMMENDATIONS FOR POLICY MAKERS 2 (2012), *available at* http://www.fsec.ucf.edu/en/education/southeast_training_network/pdfs/SEMI-PVGrp_WhPpr_MnfctngSlrPV.pdf.

95. *See* THE SOLAR FOUND., *supra* note 92, at 14–51.

find that community solar interests are, in fact, securities. In coming to this determination, this Part sets forth the general framework for determining whether the sale of a given commodity triggers securities regulations and explains the policy driving the registration requirement.

A. Securities: The Legal Framework

A security is simply a “financing or investment instrument” that entitles the holder to some distribution of property or earnings or otherwise evidences the issuer’s indebtedness to the holder of the security.⁹⁶ Securities, such as stocks and bonds, serve a crucial role in the global economy as they represent a primary means by which companies raise capital.⁹⁷ Because securities are intangible financial rights, however, they are especially susceptible to fraud, for example by unscrupulous salespeople who make grand claims and thereby talk unsophisticated purchasers into buying certificates unsubstantiated by any real economic value.⁹⁸ Because of these hazards, Congress and the SEC have promulgated a complex minefield of regulations that can subject a company to substantial liability in the event of a misstep.

The Securities Act of 1933⁹⁹ (Securities Act)—which was enacted in response to the stock market crash of 1929—governs the purchase and sale of securities; thus, the Securities Act’s provisions are triggered by the presence of a transaction rather than by the creation of the security itself.¹⁰⁰ The Securities Act’s primary goals were, first, to “require that investors receive financial and other significant information concerning securities being offered for public sale” and, second, to “prohibit deceit, misrepresentations, and other fraud in the sale of securities.”¹⁰¹ The key principal underlying federal securities regulations is that

96. See *Security Definition*, BUSINESSDICTIONARY.COM, <http://www.businessdictionary.com/definition/security.html> (last visited Jan. 6, 2014) (defining a security as “[a] financing or investment instrument issued by a company or government agency that denotes an ownership interest and provides evidence of a debt, a right to share in the earnings of the issuer, or a right in the distribution of a property”). “Securities include bonds, debentures, notes, options, shares, and warrants . . . and may be traded in financial markets such as stock exchanges.” *Id.*

97. 1 THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION § 1.1[1] (6th ed. 2009).

98. *Id.*

99. 15 U.S.C. §§ 77a–77aa (2012).

100. See CONSTANCE E. BAGLEY & CRAIG E. DAUCHY, THE ENTREPRENEUR’S GUIDE TO BUSINESS LAW 172 (4th ed. 2011). The Securities Exchange Act of 1934 immediately followed the Securities Act of 1933 and imposes ongoing registration and reporting obligations for publicly held companies. See 15 U.S.C. §§ 78a–78nn; 2 HAZEN, *supra* note 97, § 9.0.

101. *The Laws That Govern the Securities Industry*, U.S. SEC. & EXCHANGE COMMISSION, <http://www.sec.gov/about/laws.shtml> (last updated Oct. 1, 2013).

full disclosure sufficiently protects investors by giving them the “opportunity to evaluate the merits of an investment and fend for themselves.”¹⁰² In furtherance thereof, the Securities Act requires that promoters register their securities offerings with the SEC before engaging in any public solicitation; the SEC then reviews submitted materials to ensure that they contain all information “necessary or appropriate for the public interest or for the protection of investors.”¹⁰³

Unfortunately, because the cost of registering a public offering runs at least into the hundreds of thousands and can easily exceed \$1 million, compliance with securities laws is generally infeasible for community solar projects.¹⁰⁴ Although Congress has provided several narrowly circumscribed exemptions to securities compliance that are intended to ease the burden for small and startup companies, the novelty of the community solar model does not lend to easy categorization into one of these exemptions.

B. Are Community Solar Shares Investment Contracts?

The determination of whether an interest in a community solar project constitutes a security within the meaning of the Securities Act presents a threshold inquiry. If community solar interests are not, in fact, securities, then their conveyance falls beyond the scope of the Securities Act altogether.¹⁰⁵ In general, however, Congress has given the term an extraordinarily broad sweep, enumerating an expansive and extensive list of instruments that qualify as securities.¹⁰⁶ Moreover, courts have relied on the statute’s nebulous “investment contract”

102. 1 HAZEN, *supra* note 97, § 1.2[3][A].

103. 15 U.S.C. § 77(f), (g)(a)(1); *see also* BAGLEY & DAUCHY, *supra* note 100, at 172 (explaining that prospective purchasers must be provided with comprehensive disclosure of all material information about the issuer and the offering unless the transaction is exempt from registration).

104. BAGLEY & DAUCHY, *supra* note 100, at 173.

105. *See* discussion *infra* notes 128–137 and accompanying text.

106. The statutory definition of “security” is as follows:

The term “security” means any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, *investment contract*, voting-trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (including any interest therein or based on the value thereof), or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a security, or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.

15 U.S.C. § 77b(a)(1) (emphasis added).

terminology to create a flexible standard in order to encompass novel, creative interests that might otherwise evade securities compliance.¹⁰⁷

In *SEC v. W.J. Howey Co.*,¹⁰⁸ the U.S. Supreme Court set forth the seminal framework for determining if a new financing arrangement will be subject to securities regulation as an investment contract. A “contract, transaction, or scheme” constitutes an investment contract when the buyer (1) “invests his money” (2) “in a common enterprise,” (3) regarding which he has been “led to expect profits,” (4) which will accrue “solely from the efforts of the promoter or a third party.”¹⁰⁹ Notably, the fourth requirement has since been diluted to require only that profits accrue “primarily” or “substantially” from the efforts of others.¹¹⁰ The Court emphasized that substance should trump form; if economic reality supports the classification of an investment scheme as a security, then how the interest is manifested is immaterial.¹¹¹ Thus, courts have interpreted numerous unconventional interests to constitute investment contracts, finding, for example, ownership rights in fruit trees,¹¹² vacuum cleaners,¹¹³ or cattle embryos,¹¹⁴ to constitute

107. Kristin L. Bailey, Note, *Insecurity for Community Solar: Three Strategies to Confront an Emerging Tension Between Renewable Energy Investment and Federal Securities Laws*, 10 J. TELECOMM. & HIGH TECH. L. 123, 135 (2012).

108. 328 U.S. 293 (1946).

109. *Id.* at 298–99.

110. *See, e.g.*, *SEC v. Int'l Loan Network, Inc.*, 968 F.2d 1304, 1308 (D.C. Cir. 1992) (holding that investors expecting to accrue profits predominately from the efforts of others satisfy the third prong of the *Howey* test); *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473, 481–82 (5th Cir. 1974) (citing *Miller v. Cent. Chinchilla Grp., Inc.*, 494 F.2d 414 (8th Cir. 1974); *United States v. Herr*, 338 F.2d 607 (7th Cir. 1964), *cert. denied*, 382 U.S. 999 (1966)) (noting that courts have consistently found that an investor's potential involvement in the enterprise does not preclude the existence of an investment contract, and therefore the word “solely” should be broadly interpreted); *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973), *cert. denied*, 414 U.S. 821 (1973) (“[T]he word ‘solely’ should not be read as a strict or literal limitation on the definition of an investment contract, but rather must be construed realistically, so as to include within the definition those schemes which involve in substance, if not form, securities.”); *see also* 1 HAZEN, *supra* note 97, § 1.6[2][D].

111. *Howey*, 328 U.S. at 298–99.

112. *See generally id.*; *see also SEC v. Tung Corp. of Am.*, 32 F. Supp. 371 (N.D. Ill. 1940) (holding that purchasers' interests in a tung orchard were securities because the ultimate value of the tung orchard was dependent on whether the corporation—a third party—faithfully performed its obligations to successfully harvest the tung orchard).

113. *See generally Bell v. Health-Mor, Inc.*, 549 F.2d 342 (5th Cir. 1977) (holding that an “Ownership Dividend Certificate” entitling plaintiff-purchasers of defendant's vacuum cleaners to a \$10 referral fee for each prospective purchaser that a plaintiff-purchaser referred to the defendant—but only if that prospective purchaser actually attended a product demonstration by the defendant—could be considered a security if the defendant, as a third party, made substantial efforts in convincing the prospective customer to agree to schedule and attend the demonstration—but could not be considered a security if such efforts were made by the plaintiff-purchaser).

114. *See generally Eberhardt v. Waters*, 901 F.2d 1578 (11th Cir. 1990) (finding that the sale of cattle embryos was a security under state law). *But see, e.g., Bailey v. J.W.K. Props., Inc.*, 703 F. Supp.

securities when the surrounding facts suggested a sufficient investment component.¹¹⁵

In *Howey*, the defendant offered prospective purchasers a contract to purchase land in a fruit tree grove that was conditional upon the purchaser agreeing to a service contract.¹¹⁶ Purchasers bought some portion, in some cases as little as 0.65 of an acre, of a larger 500-acre fruit farm but, in effect, had no rights to specified fruit.¹¹⁷ The service company was granted a leasehold interest and control of the land under the contract; it harvested and marketed the crops for a fee, pooled the profits, and then allocated those profits to the purchasers.¹¹⁸ The Court found that the purchasers had no interest in actually occupying their land and were motivated solely by profit.¹¹⁹ Therefore, “all the elements of a profit-seeking business venture” were present: The investors’ land interests were clearly part of “[a] common enterprise managed by respondents,” whose “personnel and equipment” was essential to the investors’ “achieve[ment of] their paramount aim of a return on their investments.”¹²⁰

Community solar projects are schematically similar to the fruit tree arrangement in *Howey*. A community solar project clearly satisfies the first two prongs of the *Howey* test. First, a ratepayer “invests his money” in a community solar project. Second, that project is a “common enterprise” since a group purchases interests in the community solar installation. As to the third prong, most community solar projects create a reasonable expectation of profit because the cumulative value of bill credits is anticipated to exceed the investor’s initial investment. Fourth, these profits accrue as a result of the third-party project developers’ efforts in siting, building, and maintaining the system, as well as in handling nearly all administrative matters arising out of the project.

Nonetheless, although community solar projects seemingly fall within the scope of the term “investment contract,” several potential theories and mechanisms exist by which a project could avoid classification as a security.

478 (W.D. Va. 1989), *rev'd*, 904 F.2d 918 (4th Cir. 1990) (holding that a cattle embryo program was not a security).

115. 1 HAZEN, *supra* note 97, § 1.6[1].

116. *Howey*, 328 U.S. at 295.

117. *Id.* at 295–96.

118. *Id.* at 296.

119. *Id.* at 300.

120. *Id.*

1. Green Pricing Could Allow Community Solar Projects to Avoid Classification as an Investment Contract Because It Negates a Reasonable Expectation of Profit

Community solar projects could arguably avoid securities regulation by removing investors' expectations of profit and thus failing to satisfy the third prong. For example, Sacramento's SolarShares program clearly indicates that participating ratepayers should expect to pay about a 9 percent premium for electricity each year.¹²¹ Because the Supreme Court has held that the absence of a profit motive will preclude the finding of a security,¹²² this so-called green pricing—or the payment of a premium for renewable energy—seems to preclude the finding of a security interest.

On the other hand, over seventeen jurisdictions have adopted the *Hawaii Market* test,¹²³ which broadens the *Howey* test and requires only that the purchaser realize a “valuable benefit of some kind” in order to satisfy the third prong.¹²⁴ In the original *Hawaii Market* case, the court relied on the policy concerns underlying the Securities Act to find that the payment of fixed fees, which the purchaser would receive regardless of the profitability of the business as a whole, were nonetheless “inducements leading an investor to risk his initial investment” and thus entitled the investor to “the same protection as a participant in a profit sharing plan.”¹²⁵ Similarly, a court applying the *Hawaii Market* test could find that the Sacramento utility's promise to offset a ratepayer's consumption with solar energy generation is an “inducement” for the ratepayer's initial investment. Therefore, even if a customer's bill credits do not exceed the customer's payments, the credits nonetheless constitute a valuable financial benefit in satisfaction of the third prong of the investment contract test.

Given this divergence in jurisprudence, the use of green pricing will sometimes be insufficient to ensure that a court will not classify a community solar interest as an investment contract. Moreover, the use of green pricing is suboptimal for two reasons. First, it would perpetuate the inequity between onsite and offsite systems, and, second, it would channel the profits of com-

121. See *SolarShares FAQ*, SACRAMENTO MUN. UTIL. DISTRICT, <https://www.smud.org/en/residential/environment/solar-for-your-home/solarshares/solarshares-FAQ.htm> (last visited Jan. 6, 2014).

122. See *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 838–39 (1975) (finding no profit motive when the primary motivation for the purchase of an interest in a nonprofit, subsidized-cost housing project was to acquire a place to live).

123. *King v. Pope*, 91 S.W.3d 314, 321 (Tenn. 2002) (citing *State v. Brewer*, 932 S.W.2d 1, 13 n.13 (Tenn. Crim. App. 1996)).

124. *State v. Haw. Mkt. Ctr., Inc.*, 485 P.2d 105, 109 (Haw. 1971).

125. *Id.* at 110.

munity solar projects to utilities, developers, and these parties' shareholders—instead of to communities. Increasing the availability of affordable solar energy to middle-income Americans is a primary goal of community solar; this objective would be undermined by the pervasive use of green pricing, which would decrease both the affordability of such systems and the incentives to participate.

2. Community Solar Interests May Not Qualify as Investment Contracts if the Benefits of Such Projects Accrue Predominantly From Factors Other Than the Efforts of Third Parties

The fourth prong—whether profits accrue solely or primarily from the efforts of third parties—offers an alternative, but equally tenuous, route to avoiding classification as an investment contract. To quickly dispose of a threshold matter, attempting to circumvent this prong by ensuring participation by all community solar members is unrealistic in the vast majority of circumstances. Not only would such an arrangement generate administrative inefficiencies, but it would also probably fail to achieve its purpose. Courts value substance over form. Thus, even if ratepayers maintained a contractual right to exercise power over the project and even if they sometimes exercised that power, such an arrangement would be insufficient when *primary* control is nonetheless exerted by a governing person or body.¹²⁶ Moreover, even if the success of the community solar project requires some involvement by investors, such involvement will not preclude classification as an investment contract when management's involvement was nevertheless "significant."¹²⁷ In summary, not only would involvement of every investor be extremely difficult to orchestrate on a broad scale, but the fact-specific nature of such an inquiry also renders this avenue an ineffective protection. In fact, this route would require community solar projects to assume an ongoing and substantial risk that a court would find investor involvement to be insufficient and consequently penalize a project for not complying with securities laws.

Alternatively, the D.C. Court of Appeals has found that the fourth prong of the investment contract test is not satisfied when the promoter's postpurchase

126. See, e.g., SEC v. Unique Fin. Concepts, Inc., 196 F.3d 1195, 1201 (11th Cir. 1999) (analyzing both the language of the parties' written agreement and the actual level of control exerted by the investors).

127. See, e.g., SEC v. Koscot Interplanetary, Inc., 497 F.2d 473, 473 (5th Cir. 1974). The court held that the sale of cosmetics under a pyramid scheme structure triggered securities regulation because the "promoters retain[ed] immediate control over the essential managerial conduct of an enterprise and . . . the investor's realization of profits [was] inextricably tied to the success of the promotional scheme." *Id.* at 485.

efforts are merely ministerial, as opposed to entrepreneurial, in nature.¹²⁸ In 1996, the D.C. Court pioneered this argument in *S.E.C. v. Life Partners, Inc.*¹²⁹ In that case, the defendant-promoter compiled and sold to investors fractional interests in viatical settlements, which are contracts for the purchase of the rights to the life insurance policy proceeds of a terminally ill party.¹³⁰ The investors' "return" in the joint enterprise was the "difference between the discounted purchase price paid to the insured and the death benefit collected from the insurer, less transaction costs, premiums paid, and other administrative expenses."¹³¹ The *Life Partners* court agreed with the lower court that the defendant-promoter's postpurchase duties—which included "holding the policy, monitoring the insured's health, paying premiums, converting a group policy into an individual policy where required, filing the death claim, collecting and distributing the death benefit (if requested), and assisting an investor who might wish to resell his interest"—were correctly characterized as "ministerial" as opposed to "managerial" or "entrepreneurial."¹³² Correspondingly, the profit that the investors received from the viatical settlement was "overwhelming[ly]" determined by the actual life span of the insured, not by the promoter's efforts.¹³³

The court analogized this situation to another case that involved the sale and repurchase of silver bars. In that case, the defendant-promoter sold silver bars to investors but agreed to retain possession of and to repurchase those bars at a specified price and on a specified future date.¹³⁴ In the precedent case, the court found that "[o]nce the purchase . . . was made, the profits to the investor depended upon the fluctuations of the silver market, not [on] the managerial efforts of [the defendant-promoter]."¹³⁵ Likewise, the *Life Partners* court concluded that, because the investors' profits flowed from the life span of the insured, and not from the promoter's ministerial efforts, the viatical settlements failed the final prong of the *Howey* test and were not subject to securities regulations.¹³⁶

Similarly, a court's adoption of the ministerial/managerial distinction would support a finding that community solar interests are not investment contracts under *Howey*. If a developer were to fully construct the solar installation and negotiate all power purchase agreements for the sale of energy before selling the

128. Bailey, *supra* note 107, at 137–39.

129. SEC v. Life Partners, Inc., 87 F.3d 536 (D.C. Cir. 1996).

130. *Id.* at 537.

131. *Id.*

132. *Id.* at 545–46.

133. *Id.* at 548.

134. *Id.* at 546 (citing *Noa v. Key Futures, Inc.*, 638 F.2d 77 (9th Cir. 1980) (per curiam)).

135. *Noa*, 638 F.2d at 79.

136. *Life Partners*, 87 F.3d at 549.

solar panels to community members, the developer's postpurchase obligations could be classified as ministerial. As in *Life Partners*—in which the promoter's duties included monitoring the insured, collecting and distributing death benefits, and assisting investors in reselling their interests—a community solar developer's primary ongoing obligations would include monitoring the maintenance of the system (which could be subcontracted), assisting in the distribution of bill credits, and assisting investors seeking to resell their interests. Moreover, the investment value of a community solar project is only nominally affected by these administrative tasks, being overwhelmingly dependent on other factors, including: (1) fluctuations in the market price of electricity (as rising electricity rates make community solar investors' bill credits relatively more valuable) and (2) the longevity of the solar system (which is positively correlated with total lifetime system output and is affected by the quality of the initial system and subsequent maintenance). Because community solar investors' expectations of profit are therefore not predominantly dependent on the postsale efforts of the developer, community solar interests would not be classified as investment contracts. Thus, under *Life Partners*, a project could potentially avoid securities regulations altogether.

Unfortunately, responses to *Life Partners* have, at best, confined the case to its facts and, at worst, have manifested outright disagreement.¹³⁷ Some circuits have openly rebuffed the case, while other courts have opted for a more demure rejection—merely declining to follow *Life Partners* or holding that the facts before them are distinguishable.¹³⁸ In any event, the case remains anomalous nearly fifteen years later. Therefore, while community solar projects in the D.C. Circuit might find some solace in the *Life Partners* line of argument, it is generally unlikely to succeed.

But perhaps courts should not be so quick to dismiss *Life Partners*. If the objective of SEC regulation and the registration requirement is only to ensure that potential investors are fully informed before making investment decisions, then the *Life Partners* principle holds some merit. Once a community solar project is grid connected, its potential value is, for the most part, fixed, and the issuer's future efforts only negligibly affect its value. Thus, unlike in the case of a dynamic, ongoing business, there is minimal information asymmetry between potential investors and issuers of solar shares. Investors know the price they will

137. See, e.g., *SEC v. Mut. Benefits Corp.*, 323 F. Supp. 2d 1337, 1344 (S.D. Fla. 2004) (disagreeing with the *Life Partners* court's distinction); *Wuliger v. Christie*, 310 F. Supp. 2d 897, 903 (N.D. Ohio 2004) (declining to follow); *Lubin v. Beneficial Assurance, Ltd.*, No. 24-C-02-006515, 2006 WL 5781983, at *5 (Md. Cir. Ct. 2002) (declining to determine whether to adopt the *Life Partners* test because the promoter's postpurchase actions exceeded ministerial functions and was thus distinguishable).

138. See cases cited *supra* note 137.

receive for each kilowatt-hour (kWh) produced by the system; they know the size of the system and its estimated life span. The only element of uncertainty is the total cumulative output of the system, which is directly contingent on weather patterns. This lack of information asymmetry, in turn, reduces the potential for fraud on the part of the issuer. In short, the policy concerns underlying the registration requirement actually point against the classification of community solar interests as securities.

Despite this tension, community solar interests are very likely investment contracts under the *Howey* test and are therefore subject to federal securities regulations. But community solar projects may nonetheless avoid the most burdensome aspect of securities regulation—the registration requirement—if such projects can qualify for one of the exemptions delineated below. From a policy perspective, this is probably the right outcome. Despite classification as a security, community solar can avoid onerous compliance requirements by finding an applicable exemption. But all securities—even if transactions are exempted—must comply with state and federal antifraud rules, which subject issuers to liability if they make false statements or misleading omissions of material fact in the course of a securities offering.¹³⁹ As discussed in more depth in Part IV, this outcome strikes the right balance by providing community investors with some protection from unscrupulous developers, while still granting community solar projects the flexibility to raise funding without excessive red tape.

III. LOOKING FOR LOOPHOLES: POTENTIAL EXEMPTIONS TO THE FEDERAL REGISTRATION REQUIREMENT

This Part explores the four possible exemptions to the Securities Act's registration requirement potentially available to community solar projects: two under Regulation D, one intrastate exemption, and one potential crowdfunding exemption that has yet to be finalized. This Part concludes that, although several exemptions initially seem promising, each imposes certain conditions that will prove incompatible with widespread proliferation of community solar. Small changes on either the state or federal level, however, would provide a means by which community solar projects could successfully fit into this framework without compromising policy goals. This Part also contemplates the potential ramifications of pending legal developments.

In general, the Securities Act requires that all securities must be registered with the SEC or qualify for an exemption from registration. Even after securing

139. BAGLEY & DAUCHY, *supra* note 100, at 173–74.

a federal exemption, however, a community solar project will confront an insurmountable financial burden if it is unable to qualify for an analogous exemption from Blue Sky laws—or state securities regulations. An issuer of securities must comply with securities laws in both the state where the issuing company is located and in each state in which any offeree lives.¹⁴⁰ An offer made on a website is deemed to have been made in all fifty states and thereby triggers all fifty states' Blue Sky laws.¹⁴¹ Thus, the following federal exemptions must be viewed against the backdrop of state regulations, as the availability of a state exemption may affect what federal exemption a community solar project will choose.

A. The Regulation D Safe Harbor: Offerings up to \$1 Million and Private Placements

The first set of exemptions is found in Regulation D and includes Rules 504 and 506.¹⁴² As a preliminary note, both of these exemptions distinguish certain categories of more sophisticated investors, collectively termed “accredited investors,” from all other investors. An accredited investor is a person or entity that satisfies at least one of eight specified categories of investors;¹⁴³ these categories include financial institutions¹⁴⁴ and directors of the issuer.¹⁴⁵ Most relevantly, accredited investors also include individuals whose assets (excluding their primary residence) exceed \$1 million or who have earned at least \$200,000 annually for the past two years (wealthy investors).¹⁴⁶ All other investors are considered “nonaccredited investors.” It is important to distinguish the accredited investor requirement from the separate, but related, “sophisticated investor” requirement. As further explained below,¹⁴⁷ an investor may be nonaccredited (nonwealthy) but nonetheless financially “sophisticated.” Although the wealthy investor category is most likely to be implicated in the community solar context, most prospective community solar purchasers will be classified as nonaccredited investors.

140. *Id.* at 184–85.

141. *Id.* at 185. The offer must also comply with the laws of the District of Columbia and Puerto Rico. *Id.*

142. 17 C.F.R. §§ 230.504–506 (2013).

143. *See id.* § 230.215; *see also* 15 U.S.C. § 77b(15)(ii) (2012). Note that this Comment declines to consider Rule 505 because a project will face more difficulties qualifying for Rule 505 than for either Rule 504 or Rule 506. And, given community solar projects' precarious ability to qualify for Rules 504 and 506, an analysis of an even more infeasible exemption would be futile.

144. 17 C.F.R. § 230.215(a).

145. *Id.* § 230.215(d).

146. *Id.* § 230.501(a)(5)–(6). An investor filing jointly must have a joint income exceeding \$300,000 in each of the two most recent years in order to qualify as an accredited investor. *Id.* § 230.501(6).

147. *See* discussion *infra* notes 162–163 and accompanying text.

1. Rule 506: The Private Placement Exemption

Rule 506 was promulgated to further clarify, and to provide a safe harbor under, Section 4(a)(2) of the Securities Act.¹⁴⁸ Section 4(a)(2) provides a general exemption for “transactions by an issuer not involving any public offering,”¹⁴⁹ commonly known as the “private placement exemption.”¹⁵⁰ Because Rule 506 is a safe harbor, a project that fails the technical requirements of Rule 506 may nonetheless qualify for a Section 4(a)(2) exemption.¹⁵¹ Unfortunately, Section 4(a)(2) does not define the term “public offering,” and the Supreme Court has offered very little guidance on the issue. In the seminal case of *SEC v. Ralston Purina Co.*, the Supreme Court held that whether an issuance qualifies as a private placement under Section 4(a)(2) turns on the subjective inquiry of whether the prospective purchasers of securities needed the “protections afforded by registration” or whether they had sufficient information to “fend for themselves.”¹⁵² This test reiterates the principle underlying securities regulation that investors are sufficiently protected if they are sophisticated enough to request certain information or if such information is otherwise supplied to them.

The enormous advantage of Rule 506 is that it provides an exemption from both federal and state registration requirements.¹⁵³ A Rule 506 offeror must submit only a notice filing to the SEC (and to some states) but will avoid onerous information disclosure requirements.¹⁵⁴ Rule 506 also imposes no limitations on the amount of money that can be raised; however, this benefit is rather inconsequential as most community solar projects will not run up against the monetary caps imposed under other exemptions.

Unfortunately, Rule 506 also imposes several conditions that render the use of this exemption infeasible for most community solar projects: an investor cap, a sophistication requirement, and a general solicitation prohibition.

148. 17 C.F.R. § 230.506(a) (“Offers and sales of securities by an issuer that satisfy the conditions in paragraph (b) of this section shall be deemed to be transactions not involving any public offering within the meaning of section 4(2) of the [Securities] Act.”).

149. 15 U.S.C. § 77d(2) (2012).

150. 1 HAZEN, *supra* note 97, § 4.24. Notably, Section 4(a)(2) is synonymous with Section 4(2) as the section was recently amended to correct a prior mistake in which the “(a)” was omitted.

151. See BAGLEY & DAUCHY, *supra* note 100, at 174.

152. *SEC v. Ralston Purina Co.*, 346 U.S. 119, 125 (1953).

153. See BAGLEY & DAUCHY, *supra* note 100, at 178 (“Because Rule 506 does not require a complicated offering document if sales are made only to accredited investors and it permits sales in excess of \$5 million, Rule 506 is the exemption most commonly relied on in venture capital financings.”); *id.* at 185 (“In the case of offerings exempt pursuant to Rule 506 under Regulation D, states are permitted to require only the type of filing required by the SEC, a consent to service of process, and a filing fee.”).

154. *Id.*

First, an offering can qualify as a private placement under Rule 506 only if such securities are sold to no more than thirty-five nonaccredited investors.¹⁵⁵ In keeping with the governing principles of securities regulation, however, Rule 506 places no limitations on the number of accredited investors who may invest in any given project.¹⁵⁶

Although Rule 506's limitation on nonaccredited investors poses a potential burden for community solar projects, that burden is likely navigable. Many projects piloted to date have been well within the thirty-five investor maximum.¹⁵⁷ Nonetheless, reliance on Rule 506 would effectively force community solar projects to forego potential economies of scale or to favor investors willing to make higher monetary contributions in order to finance a larger installation while complying with the investor cap. For example, Maryland's University Park Solar—a twenty-two kW installation¹⁵⁸—was only about six times larger than an average residential installation.¹⁵⁹ Yet it would have required a contribution of \$3600 per person if split evenly among only thirty-five investors.¹⁶⁰ Therefore, Rule 506's nonaccredited investor cap would undermine the primary purpose of community solar—to increase affordable access to solar energy to middle- and lower-income purchasers.

An intuitive response to this limitation might be that a project developer could avoid this investor cap by simply issuing multiple offerings for the same project. For example, a developer could issue thirty-five securities on June 1, thirty-five securities on July 1, and thirty-five securities on August 1. Each of these offerings would allow thirty-five nonaccredited investors to participate, for a total of up to 105 investors. Unfortunately, such a strategy would fail because of the integration doctrine, which states that all sale and offering activities conducted within the six months preceding or following a Regulation D offering

155. 17 C.F.R. § 230.506(b)(2)(i) (2013) (“There [must be] no more than or the issuer reasonably believes that there are no more than 35 purchasers of securities from the issuer in any offering under this section.”).

156. 1 HAZEN, *supra* note 97, § 4.25 (“SEC Rule 506 provides an exemption for the offer and sale of securities to no more than thirty-five purchasers. . . . [A]ccredited investors’ are not counted toward that limit. Thus, for example, there could be one hundred accredited investors in addition to the thirty-five unaccredited purchasers.” (citations omitted)).

157. *See, e.g.*, FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 5 (describing the Colorado Clean Energy Collective’s first solar installation, which was owned by only eighteen to twenty members). Similarly, North Carolina’s AIRE Greenhouse Solar Project was funded by only seven to ten individuals. *Id.* at 10. Projects owned exclusively by municipalities, like Oregon’s Solar Pioneer, are also unburdened by the nonaccredited investor limitation. *Cf. id.* at 11.

158. *See id.* at 9.

159. As of 2010, the average size of a residential PV system had risen to six kilowatts (kW). *See* SHERWOOD, *supra* note 42, at 7.

160. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 33.

shall be considered part of a single offering.¹⁶¹ Therefore the three hypothetical offerings would be deemed a single offering to 105 nonaccredited investors, and consequently none would qualify for Rule 506's exemption. In fact, offerings by the same developer for multiple community solar projects at various locations might even be considered a single offering for the purposes of determining whether those securities qualify for a Regulation D exemption. The only way for a developer to ensure that various projects and offerings are not integrated would be to engage in sale and offering activities at six-month intervals and to abstain from such activities for at least a six-month period in between such offerings.¹⁶²

Second, Rule 506 imposes a sophistication requirement that would likely prove more onerous for community solar projects. Specifically, all investors must be sophisticated, meaning that each investor must "ha[ve] such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment."¹⁶³ While accredited investors are presumed to be sophisticated, nonaccredited investors—the vast majority of community solar purchasers—are less likely to satisfy the sophistication requirement unless they are represented by a "purchaser representative." Rule 501 defines a purchaser representative as a person who (1) is not an affiliate, director, employee, or holder of more than 10 percent of the stock of the issuer, (2) has sufficient knowledge and experience in financial and business matters to be capable of evaluating the merits and risks of the prospective investment, (3) has been acknowledged as the purchaser's representative by the purchaser in writing, and (4) has disclosed, in writing, any material relationship in the past two years between him or herself and the issuer.¹⁶⁴

Because a nonaccredited investor would probably have to locate a third party to analyze the potential community solar investment on the investor's behalf, the transaction costs of meeting the sophistication requirement might deter many potential investors. Assuming an arm's length transaction, the purchaser rep-

161. 17 C.F.R. § 230.502(a) (2013). The regulation provides:

Offers and sales that are made more than six months before the start of a Regulation D offering or are made more than six months after completion of a Regulation D offering will not be considered part of that Regulation D offering, so long as during those six month periods there are no offers or sales of securities by or for the issuer that are of the same or a similar class as those offered or sold under Regulation D, other than those offers or sales of securities under an employee benefit plan as defined in rule 405 under the Act.

Id. (citation omitted).

162. *See id.* (requiring that offerings be six-months apart and prohibiting the issuer from engaging in any solicitation efforts in between those offerings).

163. *Id.* § 230.506(b)(2)(ii).

164. *Id.* § 230.501(h).

representative would also demand a fee, thereby reducing the economic benefits of a community solar investment.

Third, and most problematically, Rule 506 prohibits issuers or their affiliates from engaging in any form of “general solicitation” in connection with an offering of securities.¹⁶⁵ This prohibition broadly includes “(1) [a]ny advertisement, article, notice or other communication published in any newspaper, magazine, or similar media or broadcast over television or radio; and (2) [a]ny seminar or meeting whose attendees have been invited by any general solicitation or general advertising.”¹⁶⁶ The touchstone of the general solicitation prohibition is neither the number of people solicited nor the medium of solicitation; rather, it is the absence of a genuine preexisting relationship between the promoter of the securities and the offeree.¹⁶⁷

Thus, this prohibition cannot be circumvented merely by relying on word of mouth nor by initiating contact with an offeree, ostensibly for another purpose, in order to “develop a relationship” before offering securities to that person during a subsequent interaction. Nor does it matter if the persons solicited have a demonstrated interest in purchasing the offered security.¹⁶⁸ A community solar promoter could not, for example, distribute information about purchasing a community solar interest to persons voluntarily attending an educational conference about green energy.¹⁶⁹ Nor could a promoter compile a list of attendees at such a

165. Notably, the SEC is currently in the process of promulgating regulations pursuant to the JOBS Act Section 201(a)(1), under which Congress has directed the SEC to lift the ban on general solicitation for offerings made *only* to accredited investors. JOBS Act, H.R. 3606, 112th Cong. § 201(a)(1) (2012); *see also* Press Release, Sec. & Exch. Comm’n, SEC Proposes Rules to Implement JOBS Act Provision About General Solicitation and Advertising in Securities Offerings (Aug. 29, 2012), available at <http://www.sec.gov/news/press/2012/2012-170.htm>; *SEC Seeks Comments on First Set of Proposed Rules Under JOBS Act*, CROWDFUND INTERMEDIARY REG. ADVOCATES (Aug. 29, 2012, 7:01 PM), <http://www.cfira.org/?p=1075> (“Under the proposed rules, companies issuing securities would be permitted to use general solicitation and general advertising to offer securities, provided that: 1. The issuer takes reasonable steps to verify that the purchasers of the securities are accredited investors[, and] 2. All purchasers of securities are accredited investors . . .”). Nonetheless, as the majority of community solar investors would be nonaccredited, this exemption produces more of a liability than a benefit, since the inadvertent solicitation of even one nonaccredited investor could result in liability for the community solar developer.

166. 17 C.F.R. § 230.502(c).

167. 1 HAZEN, *supra* note 97, § 4.20[3][C].

168. *See, e.g.*, Robert Testa, Exchange Act Release No. 7018, 1993 WL 391648, at *2–4 (Sept. 29, 1993) (holding that the defendant had violated the Securities Act by obtaining a list of physicians and mailing them a solicitation letter containing medical information because such acts constituted general solicitation).

169. *See, e.g.*, Kenman Corp., SEC Release No. 21962, 1985 WL 548507, at *3 n.6 (Apr. 19, 1985) (citing a letter titled “No Action Letter re: Aspen Grove” and finding that the proposed distribution of solicitation materials for limited partnership interests in a horse-breeding venture to persons in attendance at a horse sale would qualify as general solicitation).

conference in order to send them information regarding the purchase of solar securities later.¹⁷⁰ Also recall that the SEC considers the posting of information regarding an offering on a website to constitute an offer to every person within the fifty states, which certainly qualifies as general solicitation.¹⁷¹ Most problematically, a single act of general solicitation—even if the recipient of the illicit solicitation *does not actually purchase the securities*—will remove the entire securities offering from the ambit of the Rule 506 exemption.¹⁷²

The Rule 506 prohibition on public solicitation renders the goal of community solar—to expand opportunities to purchase solar generation to the general public—impossible. The participation of numerous investors is an inherent component of community solar. In fact, states with community solar bills generally limit the amount of rights to solar energy that a single participant can purchase to some percentage (for example, 120 percent) of household usage.¹⁷³ Thus, community solar laws typically make it impossible for only a few investors to form a community solar project.¹⁷⁴ In short, while Rule 506 could work in unique circumstances—such as if a small, preexisting community group, whose members

170. For example, in *District Business Conduct Committee for District No. 3 v. Prendergast*, Complaint No. C3A960033, 1999 WL 1022140, at *20 (N.A.S.D.R. July 8, 1999), the National Adjudicatory Council cited *Kenman Corp.*, noting:

The SEC has stated that, in determining what constitutes a general solicitation, it “has underscored the existence and substance of pre-existing relationships between the issuer and those being solicited.” Here, the advertisement invited the general public to attend [the offeror’s] seminar to learn how to invest in hedge funds. There is no evidence that the advertisement was intended to or did reach only potential investors who had a pre-existing relationship with [the offeror]. Accordingly, we find that [the offeror’s] advertisement constitutes a “general solicitation.”

Id. (citation omitted); *see also Kenman Corp.*, S.E.C. Release No. 21962, at *3 n.6 (confirming that the solicitation of prospective investors who are members of organizations relating to the subject matter of the security is nonetheless general solicitation).

171. *See supra* note 141 and accompanying text. Notably, some community solar websites do in fact currently engage in general solicitation—perhaps because many people do not realize the scope of securities regulation. *See infra* text accompanying notes 259–262 for further discussion of the legal framework confronting such developers.

172. *See* 17 C.F.R. § 230.502(c) (2013) (“[N]either the issuer nor any person acting on its behalf shall offer . . . the securities by any form of general solicitation or general advertising . . .” (emphasis added)).

173. *See, e.g.,* H.B. 10-1342, 67th Gen. Assemb., 2d Reg. Sess. (Colo. 2010) (stating that Section 1 of Colorado’s Community Solar Gardens bill “[l]imits the size of a subscription to 120% of the average annual electric consumption of each subscriber at the premises to which the subscription is attributed”).

174. Notably, two exceptions to this statement exist. First, having only a few investors would not be problematic if the project was extremely small. Second, if community solar investors were able to find a third-party buyer—such as a school—then those investors would receive cash revenues instead of bill credits and would not be subject to the 120 percent cap.

met the sophistication requirement, chose to develop their own community solar project—the general community solar model does not fit into the Rule 506 mold.

2. Rule 504: The Small Offering Exemption

Rule 504 provides an exemption for offerings whose aggregate offering price does not exceed \$1 million within a twelve-month period.¹⁷⁵ An offering that otherwise qualifies for Rule 504 will not be disqualified by subsequent issuances that, cumulatively, exceed the \$1 million cap.¹⁷⁶ For example, assuming that an issuance of securities for \$800,000 on January 1st of year one meets all the other conditions of Rule 504, then an offering of \$600,000 on August 1st of year one will not remove the January 1 offering from the ambit of Rule 504. The August 1 offering, on the other hand, will not qualify for Rule 504's exemption,¹⁷⁷ and the \$600,000 August issuance would count toward the \$1 million cap for a full year—until August 1 of year two.¹⁷⁸

At first glance, Rule 504 seems like a viable option: It imposes no limitations on the number of purchasers and contains no sophistication requirement. Unfortunately, Rule 504 also effectively bans general solicitation. Although two narrow exceptions exist, they are not particularly helpful in the community solar context as they involve either making voluminous disclosure under Blue Sky laws or making offerings to accredited investors only.¹⁷⁹ Furthermore, the chief drawback of Rule 504 is that, unlike Rule 506, it does not exempt offerings from

175. 17 C.F.R. § 230.504(b)(2) (2013).

176. *See id.* § 230.504(b)(2) note 1.

177. *See id.* § 230.504(b)(2) note 2 (“If a transaction under § 230.504 fails to meet the limitation on the aggregate offering price, it does not affect the availability of this § 230.504 for the other transactions considered in applying such limitation. For example, if an issuer sold \$1,000,000 worth of its securities on January 1, 1988 under this § 230.504 and an additional \$500,000 worth on July 1, 1988, this § 230.504 would not be available for the later sale, but would still be applicable to the January 1, 1988 sale.”).

178. *See id.* § 230.504(b)(2) note 1 (“The calculation of the aggregate offering price is illustrated as follows: If an issuer sold \$900,000 on June 1, 1987 under this § 230.504 and an additional \$4,100,000 on December 1, 1987 under § 230.505, the issuer could not sell any of its securities under this § 230.504 until December 1, 1988. Until then the issuer must count the December 1, 1987 sale towards the \$1,000,000 limit within the preceding twelve months.”).

179. The first exception allows for general solicitation only if it is permitted by state laws governing the issuance and as long as the developer sells only to accredited investors. *See id.* § 230.504(b)(1)(iii). Because the limitation to only accredited investors is incompatible with the essence of community solar, this exemption is unhelpful. The second exemption, which is available only in some states, allows for general solicitation if that solicitation is made in only one state and is accompanied by substantial disclosure documentation that complies with that state's securities law registration requirements. *See id.* § 230.504(b)(1)(i). However, this disclosure can prove as formidably expensive as federal registration requirements, or worse, this option may be altogether unavailable under state law.

state Blue Sky laws.¹⁸⁰ The obvious implication of this is that an issuer may circumvent federal regulations only to confront analogous—or even more burdensome—rules at the state level. Unlike the SEC, the majority of state securities regulators conduct what is referred to as merit review—that is, in addition to reviewing the proposed offering to ensure complete disclosure, state regulators can deny an offering if they determine that the terms offered to investors are not “fair, just, and equitable.”¹⁸¹ Even more problematic is the fact that the vast majority of state laws directly contradict Rule 504, thus rendering its allowances a nullity.¹⁸² Although some variation among states exists, most states prohibit general advertising or solicitation and impose a cap of thirty-five nonaccredited investors, even for Rule 504 offerings.¹⁸³ The result of this state-federal interaction is that reliance on Rule 504 is infeasible in many states.

Nevertheless, Rule 504 offers more potential for community solar than Rule 506. States could either amend their state securities laws to mirror Rule 504 or could remove the additional state restrictions on Rule 504 offerings for community solar projects only. Such a solution is well within the realm of possibility: A handful of states, including Connecticut, Colorado, and Washington, have already passed such legislation.¹⁸⁴ With either amendment, Rule 504 provides a viable option for community solar projects. Because projects are medium sized, community solar installations would fall well within the \$1 million cap. Admit-

180. BAGLEY & DAUCHY, *supra* note 100, at 177.

181. See Stuart R. Cohn, *The Impact of Securities Laws on Developing Companies: Would the Wright Brothers Have Gotten off the Ground?*, 3 J. SMALL & EMERGING BUS. L. 315, 324 & n.31 (1999) (“‘Merit review’ remains a component of the securities laws of most states, although in differing forms. The traditional ‘fair, just, and equitable’ standard is found in approximately twenty states. Most states authorize denial of registration if the administrator finds that the offering may tend to work a fraud upon investors.” (citing IOWA CODE ANN. § 502.209(1)(e) (West 1998))).

182. Stuart Cohn notes:

The Uniform Limited Offering Exemption (ULOE), the principal registration exemption in a majority of the states . . . conflicts with Rule 504 in several important respects. ULOE does not permit general advertising or solicitation, imposes a cap of thirty-five nonaccredited investors, and imposes a suitability requirement for sales to nonaccredited investors. A few states have linked their exemptions to federal exemptions, . . . but these states are a distinct minority.

Id. at 341 n.80 (citation omitted); see also *id.* at 328 n.39 (“[M]ost states do not exempt offerings that are as unregulated as Rule 504; thus, issuers cannot utilize Rule 504 in those states.”).

183. *Id.*; see also BAGLEY & DAUCHY, *supra* note 100, at 188–93 (listing various state exemptions and the primary conditions of those exemptions). For example, the Colorado exemption that applies to federal Rule 504 offerings nonetheless prohibits general solicitation. BAGLEY & DAUCHY, *supra* note 100, at 188. Similarly, Connecticut’s Rule 504 exemption requires that issuers provide each offeree with a written disclosure statement and imposes a thirty-five investor cap. See *id.* at 188–89.

184. Joy Hughes, *Community Shared Solar Legislation Moving Forward Across America*, SOLAR GARDENS COMMUNITY POWER (Mar. 1, 2013, 10:59 AM), <http://blog.solargardens.org/2013/03/community-shared-solar-legislation.html>.

tedly, the \$1 million cap in any given twelve-month period might slow the rate of proliferation of community solar projects if the SEC considers multiple community solar projects by the same developer to constitute a single “offering.” But this concern could be almost entirely eliminated by the SEC’s issuance of a no action letter stating that separate projects will be viewed as separate offerings.

B. Section 3(a)(11): The Intrastate Offering Exemption

Section 3(a)(11) of the Securities Act provides that “[a]ny security which is a part of an issue *offered and sold* only to persons resid[ing] within a single State . . . where the issuer of such security is a person [residing] and doing business within . . . such State” is exempt from federal securities regulation.¹⁸⁵ Both courts and the SEC have narrowly interpreted the intrastate exemption.¹⁸⁶ Moreover, because it requires that a single state be both a corporate issuer’s principal place of business and its place of incorporation, this exemption is often criticized as antiquated in light of the national and international nature of modern business.¹⁸⁷

Nonetheless, the intrastate exemption may be uniquely suitable in the community solar context. To date, community solar developers typically operate on a local scale—developing a single installation in a specific community¹⁸⁸—or, at most, on a statewide scale.¹⁸⁹ Although the geographic scope of community solar development may expand as the movement gains momentum, certain characteristics of community solar render it inherently local. For example, administrability concerns in calculating bill credits necessitate that all participants in a single system be customers of the same utility company.¹⁹⁰ And because utility

185. 15 U.S.C. § 77c(a)(11) (2012) (emphasis added).

186. 1 HAZEN, *supra* note 97, § 4.12.

187. *See id.*

188. Local entities developed many currently operational solar projects. For example, the Florida Key Electric Cooperative Simple Solar Program offers cooperative members the opportunity to lease the rights to energy produced by a single 175-watt system. *See* FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 8. Similarly, Maryland’s University Park Solar is a special purpose limited liability company (LLC) organized and operated solely within the state of Maryland; the group has one operational project on a local church and has formed a second special purpose LLC in order to pursue the installation of a second project on the roof of a school. *See id.* at 9–10; *Our Proposal for University Park Elementary School*, UNIV. PARK SOLAR, <http://www.universitypark.solar.com/Projects.htm> (last visited Jan. 6, 2014). Many other examples are available. *See generally* FARRELL, COMMUNITY SOLAR POWER, *supra* note 21 (discussing examples of solar projects developed by local entities in numerous states).

189. For example, the Colorado Clean Energy Collective has set up an easily duplicated model so that it can continue to build new projects around the state of Colorado. *See generally* CLEAN ENERGY COLLECTIVE, <http://www.cleanenergycollective.com/default.aspx> (last visited Jan. 6, 2014).

190. Because of the physical realities of the electric grid, a single utility company will contract to purchase all the energy produced by any given solar installation. Attempting to disaggregate such

companies are local entities, community solar participants are necessarily local residents.

Thus, the requirement that all parties reside within a single state does not impose an unduly burdensome requirement on community solar projects. Importantly, however, the plain text of Section 3(a)(11) clearly indicates that securities will not qualify for the intrastate exemption unless all purchasers and *all offerees* are residents of the same state.¹⁹¹ Thus, a single offer to an out-of-state resident, even if that person does not in fact purchase the securities, will remove the entire offering from the intrastate exemption.¹⁹² The implication of this rule is that developers likely cannot offer securities nor solicit prospective customers online, since securities offerings posted on websites would be deemed to have been offered to persons in all fifty states.¹⁹³

Like Rule 504, however, intrastate transactions are subject to the full force of Blue Sky laws.¹⁹⁴ Because “[t]he entire premise of the intrastate exemption from federal registration is that the states are more appropriate regulators for transactions occurring solely within the borders of a single state,” this rule makes sense.¹⁹⁵ Nonetheless, this disadvantage imposes an insurmountable burden on community solar projects in most states, because (as discussed previously)¹⁹⁶ many states’ securities laws are even more stringent than federal requirements. For example, states may impose a cap on nonaccredited investors or prohibit general solicitation for all offerings, no matter how small.

Like Rule 504, however, the intrastate exemption offers communities the opportunity to initiate action at the state level in order to create an exemption from onerous securities laws for community solar. The fact that action on the community solar issue has occurred primarily on the state level also indicates that state legislatures may offer the most politically viable forum for the adoption of policies favoring community solar. Thus, the intrastate exemption could provide a useful tool for future projects.

production and coordinate bill credits across multiple utility companies—each of which charge different electricity rates, purchase energy at different prices, and have diverse internal accounting and billing systems—would clearly raise administrability concerns.

191. See 15 U.S.C. § 77c(a)(11) (2012) (exempting only securities that are “offered and sold” only to residents of a single state).

192. See 1 HAZEN, *supra* note 97, § 4.12[1] (“From the face of the statute, it is apparent that in order to qualify for a section 3(a)(11) exemption, not only all purchasers but also all offerees of the securities in question must be residents within a single state.”).

193. See *supra* note 141 and accompanying text.

194. See 1 HAZEN, *supra* note 97, § 4.12[3].

195. *Id.*

196. See *supra* notes 182–183 and accompanying text.

C. Crowdfunding: Potential Exemption for Small Online Contributions

In April 2012, the Jumpstart Our Business Startups Act (JOBS Act) created a new crowdfunding exemption that, in theory, offered a viable solution for community solar projects: It promised to relax the general ban on solicitation, to create a new entity—the “funding portal”—which would permit Internet platforms to offer securities without registering as brokers, and to allow companies to raise up to \$1 million annually via public, online offerings.¹⁹⁷ Indeed the only major limitation imposed by the JOBS Act is on the amount of securities that could be sold to any single investor.¹⁹⁸ For investors whose net worth or annual income is below \$100,000, the aggregate amount purchased in a twelve-month period cannot exceed “the greater of \$2000 or 5 percent of the annual income or net worth of such investor.”¹⁹⁹ Investors whose net worth or annual salary is greater than \$100,000 can purchase up to 10 percent of their annual income or net worth, but not more than \$100,000.²⁰⁰

The initial optimism over crowdfunding has dissipated, however.²⁰¹ Throughout 2013, the SEC was widely criticized for failing to even *propose* new crowdfunding regulations, which Congress had instructed were to be *finalized* by December 31, 2012.²⁰² As these regulations are prerequisite to the implementation of an equity crowdfunding market, many interpreted the SEC’s delay as an attempt to “kill” crowdfunding or feared that the eventual regulations would prove so cumbersome as to render the exemption useless.²⁰³

Despite dragging its feet through much of 2013, a change in SEC leadership ultimately precipitated the long-awaited promulgation of two key rules necessary to bring the promises of the JOBS Act to fruition.²⁰⁴ First, on July 10,

197. Tanya Prive, *5 Key Points to Know About Equity Crowdfunding*, FORBES, Jan. 15, 2013, <http://www.forbes.com/sites/tanyaprive/2013/01/15/5-key-points-to-know-about-equity-crowdfunding>.

198. JOBS Act, H.R. 3606, 112th Cong. § 302(a)(6)(A)–(B) (2012).

199. *Id.* § 302(a)(6)(B)(i).

200. *Id.* § 302(a)(6)(B)(ii).

201. Robb Mandelbaum, ‘Crowdfunding’ Rules Are Unlikely to Meet Deadline, N.Y. TIMES, Dec. 26, 2012, <http://www.nytimes.com/2012/12/27/business/smallbusiness/why-the-sec-is-likely-to-miss-its-deadline-to-write-crowdfunding-rules.html>.

202. See Prive, *supra* note 197.

203. See Chance Barnett, *Will the S.E.C. Kill Crowdfunding?*, FORBES, Feb. 19, 2013, <http://www.forbes.com/sites/chancebarnett/2013/02/19/will-the-s-e-c-kill-crowdfunding>; see also Scott Shane, *SEC: Don’t Make Crowdfunding Useless for Main Street*, BLOOMBERG BUSINESSWEEK (Feb. 4, 2013), <http://www.businessweek.com/articles/2013-02-04/sec-don-t-make-crowdfunding-useless-for-main-street> (expressing fear that “too much investor protection will make crowdfunding unworkable because the businesses won’t be able to afford to comply” and that the SEC’s delay may toll such an outcome).

204. Carrie Ghose, *JOBS Act Delay Roils Crowdfunding Backers*, COLUMBUS BUS. FIRST (Apr. 19, 2013, 6:00 AM), <http://www.bizjournals.com/columbus/print-edition/2013/04/19/jobs-act-delay>

2013, the SEC approved a final rule that officially amended Rule 506 to “permit issuers to use general solicitation and general advertising to offer their securities provided that . . . [t]he issuer takes reasonable steps to verify that the investors are accredited investors.”²⁰⁵ And on October 23, 2013, the SEC generated even more excitement by issuing proposed rules for equity crowdfunding—556 days after the passage of the JOBS Act.²⁰⁶ Notably, however, those awaiting the launch of an equity crowdfunding market will have to wait a bit longer. The proposed rules will undergo a ninety-day comment period, after which the SEC will review and potentially revise its proposed rules. In light of this procedure, many in the investment community predict that these rules will not be finalized until late 2014, and only then can an equity crowdfunding market emerge.²⁰⁷

Although some uncertain therefore remains as to the precise ramifications of these developments for community solar projects, the SEC’s new rules suggest that the JOBS Act will ultimately provide very little solace for community solar. To start, the relaxation of the on general solicitation (which has been finalized) is quite narrow. It applies only in the context of Rule 506 offerings and only to offerings to accredited investors. As previously described herein, many prospective community solar investors are not accredited; thus, the new rule fails to increase the accessibility of community solar with respect to them. Similarly, although the SEC has stated its intent to strike a proper balance between facilitating crowdfunding and protecting investors from fraud,²⁰⁸ commentators have expressed numerous concerns that the new rules will do little to help most

roils-some-firms.html?page=all (“New SEC Chairwoman Mary Jo White was sworn in April 10, four months after the resignation of Mary Schapiro. The former chairwoman opposed the crowdfunding bill and delayed the rules over concerns about fraud and investor losses In confirmation hearings, White said her top priorities would be rule-making for Dodd-Frank Wall Street reforms and the JOBS Act”); Dan Primack, *SEC Finally Does Its Job on Crowdfunding*, CNN MONEY (Oct. 23, 2013, 1:52 PM), <http://finance.fortune.cnn.com/2013/10/23/sec-finally-does-its-job-on-crowdfunding>.

205. Fact Sheet, Sec. & Exch. Comm’n, Eliminating the Prohibition on General Solicitation and General Advertising in Certain Offerings (July 10, 2013), *available at* <http://www.sec.gov/news/press/2013/2013-124-item1.htm>.
206. Press Release, Sec. & Exch. Comm’n, SEC Issues Proposal on Crowdfunding (Oct. 23, 2013), *available at* <http://www.sec.gov/News/PressRelease/Detail/PressRelease/1370540017677#.UstypGRDvMs>.
207. Ted Knutson, *Final Crowdfunding Rules Not Likely Until Late 2014*, FIN. ADVISOR (Aug. 27, 2013), <http://www.fa-mag.com/news/final-crowdfunding-rules-not-likely-until-late-2014-15305.html>; Nat Rudarakanchana, *Crowdfunding in 2014: Forecasts as Equity Crowdfunding Takes off*, INT’L BUS. TIMES (Dec. 23, 2013, 3:46 PM), <http://www.ibtimes.com/crowdfunding-2014-forecasts-equity-crowdfunding-takes-1518870>.
208. Press Release, Sec. & Exch. Comm’n, *supra* note 206 (relying the following statement by SEC Chair Mary Jo White: “There is a great deal of excitement in the marketplace about the crowdfunding exemption, [but] . . . [w]e want this market to thrive in a safe manner for investors.”).

small businesses or small investors.²⁰⁹ For example, crowdfunding must still occur through a registered funding portal or broker-dealer, and a company must still file various financial statements, a narrative of financial results, detailed information about the offering, and information about the company itself, its officers and owners, its current debt, and certain risk factors.²¹⁰ Although these disclosures seem highly relevant to any investment decision and therefore reasonable, only time will tell whether the costs of such disclosure and registration will outweigh the benefits of this new forum—especially in light of the \$1 million funding cap.²¹¹ Relatedly, traditional investment banks have shown little interest in crowdfunding, leading to fears that crowdfunding may attract smaller, less reputable financial institutions to service more vulnerable companies and investors.²¹² In short, crowdfunding may ultimately do little to increase the accessibility of quality investments to nonaccredited investors.

To be fair, however, the new rules will likely increase the accessibility of capital for community solar projects as such projects can now freely solicit funding from accredited investors. Moreover, the availability of an online forum will further facilitate the flow of capital to community solar projects. Nevertheless, the asymmetrical access to community solar opportunities is likely to persist, as developers will likely prefer to solicit fewer, larger investments from accredited investors over complying with the more cumbersome and expensive rules necessary to solicit investments from nonaccredited investors.

Thus, the availability of a crowdfunding exemption for community solar projects remains uncertain and will likely turn on how burdensome the disclosure requirements imposed on crowdfunding offerings prove to be.²¹³ And a crowd-

209. Brian Korn, *SEC Proposes Crowdfunding Rules*, FORBES, Oct. 23, 2013, <http://www.forbes.com/sites/deborahljacobs/2013/10/23/sec-proposes-crowdfunding-rules>; Sherwood Neiss, *It Might Cost You \$39K to Crowdfund \$100K Under the SEC's New Rules*, VENTURE BEAT (Jan. 2, 2014, 2:14 PM), <http://venturebeat.com/2014/01/02/it-might-cost-you-39k-to-crowdfund-100k-under-the-secs-new-rules>; Sarah N. Lynch, *SEC Releases 'Crowdfunding' Rule*, REUTERS (Oct. 23, 2013, 6:05 PM), <http://www.reuters.com/article/2013/10/23/us-sec-crowdfunding-idUSBRE99M03O20131023>.

210. Crowdfunding, 78 Fed. Reg. 66,428, 66,432–65 (proposed Nov. 5, 2013) (to be codified at 17 C.F.R. pts. 200, 227, 232, 239, 240, 249).

211. See Korn, *supra* note 209 (“To produce an offering disclosure document, enlist a funding portal, run background checks and file an annual report with the SEC year after year might well cost upwards of \$100,000. The high expenses compared to the low maximum amounts that can be raised by a company and invested by an individual make public equity crowdfunding one of the costliest forms of (legal) capital raising.”).

212. See *id.*

213. See D. Scott Freed, *Crowdfunding as a Platform for Raising Small Business Capital*, MD. B.J., July/Aug. 2012, at 12, 17. As Freed observes:

Any crowdfunding proposal that requires registration of crowdfunded offerings with the SEC or state securities regulators would destroy the usefulness of

funding exemption will be of little use unless issuers can also locate an exemption to state securities laws. In short, state action will probably still prove most beneficial to community solar advocates.

IV. HONESTY IS THE BEST POLICY: WHY ANTIFRAUD PROVISIONS ARE SUFFICIENT TO PROTECT COMMUNITY SOLAR INVESTORS

As is illuminated by Part III, two different approaches to eviscerating the barrier posed by securities regulations exist. First, advocates could seek legislation providing an exemption at the state level for community solar projects that qualify for a federal exemption under Rule 504's small offering exemption or under Section 3(a)(11)'s intrastate exemption. Alternatively, Congress could pass legislation—like it did in the context of Rule 506—that simultaneously exempts securities issuances from federal regulations, preempts state securities regulations, and creates an exemption to the ban on general solicitation.²¹⁴ In light of the current regulatory framework and its underlying principles, such an amendment would most easily and logically occur under Rule 504. As a policy matter, a uniform, federal approach seems both more feasible and practicable than the creation of a motley collection of state law community solar exemptions.

But would a preemption of state law under Rule 504 strike the right balance between facilitating community solar investment and consumer protection? The short answer is yes. Such a rule would classify community solar shares as securities but exempt them from state and federal registration.²¹⁵ Recall that classification as a security triggers antifraud provisions under the Section 10(b) of the Exchange Act of 1934, from which issuers are never exempted.²¹⁶ These

crowdfunding and should be avoided. Similarly, a crowdfunding exemption that allows states to impose their own crowdfunding rules would increase costs and complexity and likely discourage the use of crowdfunding by many companies.

Id.

214. Recall that the chief advantage of Rule 506 is that—unlike Rule 504—it preempts state securities laws. *See supra* notes 153, 180 and accompanying text. Also note, however, that the JOBS Act repealed the solicitation ban only for Rule 506 offerings made exclusively to accredited investors. *See supra* note 165. This Comment proposes extending that appeal to nonaccredited investors in the community solar context.

215. BAGLEY & DAUCHY, *supra* note 100, at 173–74.

216. *See* 15 U.S.C. § 78j, (b) (2012). Specifically, the statute provides:

It shall be unlawful for any person . . . [t]o use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered, or any securities-based swap agreement . . . any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.

Id.

antifraud provisions would impose liability on project developers for any untrue statements or any misleading omissions of material fact that were made in the course of selling solar shares, as well as for any acts which “operate as a fraud or deceit upon any person in connection with the purchase or sale of any security.”²¹⁷ Whereas a finding that securities are not investment contracts—and therefore are not securities at all—would strip community solar investors of such protection, the framework proposed herein would ensure community members access to a remedy against fraud.

This protection, coupled with the nature of community solar, renders onerous registration and information requirements unnecessary. The principal purpose of the registration requirement is to ensure that prospective investors are fully informed of the business risks and rewards associated with a potential investment. The Rule 504 exemption recognizes that this protection is less necessary for smaller, simpler business models—like a community solar project. Unfortunately, the principle underlying Rule 504 is not reflected by reality, since states impose analogous registration requirements on securities exempted under Rule 504. Especially in the context of community solar, registration and meticulous disclosure is unnecessary because the risks and rewards of participation are readily apparent. For this reason, the preemption of state registration requirements for community solar projects relying on Rule 504 merely achieves the goal of that regulation.²¹⁸

217. 17 C.F.R. § 240.10b-5 (2013) further provides:

It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange[:] (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

Id.

218. Crucially, this argument should not be misinterpreted as promoting the deregulation of securities transactions. Rather—because the driving principle behind securities regulations has been that the government should *not* interfere with investors’ free choice (regardless of how imprudent that choice may be) as long as that investor is fully informed—state regulation under a Rule 504 exemption in fact frustrates that goal. Specifically, Rule 504 recognized that the level of disclosure necessary to achieve the goal of ensuring fully informed investors is substantially lower in the context of small offerings, which are frequently issued by small or startup businesses. Thus, the complex reporting requirements impose a formidable burden while doing very little to further the purpose of securities laws. By imposing additional requirements on issuers otherwise exempted by Rule 504, states are in fact diverging from these well-established principles and taking a much more paternalistic approach to securities regulation.

A repeal of the ban on general solicitation is likewise necessary to achieve the goals of community solar, as community outreach and widespread involvement is an integral part of that model. Although some critics argue that modern developments warrant a complete repeal of the ban,²¹⁹ a narrower provision allowing general solicitation in the context of community solar securities suffices for the purposes of this Comment. As further explained below, such a repeal would not threaten consumer protection, as the justifications for the ban are inapplicable in the community solar context.

A product of the stock market collapse of 1929, federal securities regulations seek to simultaneously achieve two diametrically opposing objectives: increasing access to capital and preventing fraud by unscrupulous investment schemes—such as those perpetuated by Enron, Charles Ponzi, and Bernard Madoff.²²⁰ The prohibition on general solicitation in exchange for an exemption from federal registration reflects an attempt to balance these goals.²²¹ Nonetheless, the issue of general solicitation has been hotly contested for eighty years.²²² On the one hand, many fear that allowing mass solicitation of unsophisticated investors is simply asking for trouble. A primary justification for the rule has been that it prevents fraud by making it more difficult for unscrupulous dealers to attract investors and provides a tool for identifying and punishing such dealers if their activities become too public.²²³ Some evidence supports this assumption. In 1992, the SEC lifted the general solicitation ban for Rule 504 offerings.²²⁴ The SEC was prompted, however, to reinstate the ban just seven years later in response to “pump and dump” schemes that occurred between 1992 and 1999.²²⁵ A pump

219. See *infra* notes 228–232 and accompanying text.

220. See John T. Palter, *Benefits and Compliance Concerns Related to the Passage of the JOBS Act*, in ASPATORE SPECIAL REPORT: UNDERSTANDING THE JUMPSTART OUR BUSINESS STARTUPS ACT: AN IN-DEPTH LOOK AT THE POTENTIAL IMPACT OF THE JOBS ACT ON ATTORNEYS AND THEIR CLIENTS 41, 41 (2012).

221. Cf. Karina Sigar, Comment, *Fret No More: Inapplicability of Crowdfunding Concerns in the Internet Age and the JOBS Act's Safeguards*, 64 ADMIN. L. REV. 473, 487 (2012) (“The overarching rationale for prohibiting general solicitation is to protect investors, which is one of the dual functions of the SEC.”).

222. See Palter, *supra* note 220, at 41.

223. See William K. Sjostrom, Jr., *Relaxing the Ban: It's Time to Allow General Solicitation and Advertising in Exempt Offerings*, 32 FLA. ST. U. L. REV. 1, 42 (2004); see also U.S. GEN. ACCOUNTING OFFICE, GAO/GGD-00-190, SMALL BUSINESS: EFFORTS TO FACILITATE EQUITY CAPITAL FORMATION 30 (2000) (explaining the SEC's stance that “[t]he prohibition on general solicitation . . . helps minimize the risks of widespread fraud”).

224. See Small Business Initiatives, 57 Fed. Reg. 36,442, 36,443 (Aug. 13, 1992) (codified at 17 C.F.R. §§ 200, 228, 229, 230, 239, 240, 249, 260 (2013)).

225. See Revision of Rule 504 of Regulation D, the “Seed Capital” Exemption, Exchange Act Release No. 7644, 69 SEC Docket 364, 1999 WL 95490 (Feb. 25, 1999) (justifying the reinstatement of

and dump scheme is a method of stock manipulation in which an unscrupulous broker inflates the price of “penny stocks”—stocks costing less than one dollar per share—by selling them to investors via phone and internet marketing, and then immediately dumps the broker’s own holdings, thus leaving investors with deflated shares.²²⁶ In short, proponents of investor protection and the SEC fear that rescinding the general solicitation ban would “bring back the ‘boiler rooms’ of the 1990s Internet stock bubble that financially harmed many investors.”²²⁷

On the other hand, critics argue that such a sweeping prohibition causes more harm than good: Effectively, it prevents honest companies from raising much-needed capital but does little to actually thwart unscrupulous issuers who are unlikely to think twice about a rule prohibiting public solicitation.²²⁸ A second criticism is that the advent of mass communication systems and the Internet has rendered the concerns of the 1990s a thing of the past. For example, author Karina Sigar argues that “[i]ncreasing Internet use has also coincided with, if not created, a cyberculture of information sharing. Not only do people provide content for the development of a single product, people also communicate with one another and verify facts as part of their consumption and investment decisionmaking.”²²⁹ The Internet offers numerous new safeguards to modern investors that undercut the need for a general solicitation ban. To start, public access to financial information online allows investors to verify information received through general solicitation.²³⁰ Likewise, the increase in consumer reliance on online product research facilitates the ability of consumers to

the general solicitation prohibition under Rule 504 as a necessary measure to prevent “pump and dump” abuses).

226. See Sigar, *supra* note 221, at 488.

227. See *id.* (“SEC Chairman Mary Schapiro underscored the importance of taking the pump and dump experience into account for future exemptions on general solicitation and resale.” (citing Letter from Mary L. Schapiro, Chairman, Sec. & Exch. Comm’n, to Darrell E. Issa, Chairman, H. Comm. on Oversight & Gov’t Reform 23 (Apr. 6, 2011), available at <http://www.sec.gov/news/press/schapiro-issa-letter-040611.pdf>)).

228. See Sjostrom, *supra* note 223, at 42.

229. Sigar, *supra* note 221, at 490. Sigar also notes that, in 1990, only approximately 2.2 million Americans had internet access; by 2010, however, approximately 240 million Americans had become internet users. *Id.* at 489.

230. Sigar goes on to note:

As for investments, information on issuers available on the Internet can typically be found on a company’s home page, which has product and financial information, broker-dealer websites, financial portals, active message boards, and chat rooms frequented by market participants. Unlike in the 1980s, when people had to depend on brokers and dealers to obtain information about a company, today’s conscientious citizenry can obtain information themselves by maneuvering through the increasingly simple and user-friendly Internet infrastructure.

Id. at 490 (footnote omitted).

warn each other about potentially fraudulent schemes.²³¹ Finally, the rise of grassroots crowdfunding tools, such as “Open Crowdfund,” which provide online reputation-checking services, will allow consumers to investigate companies before investing in them.²³²

The veracity of these counterarguments is magnified in the community solar context. Unlike high-tech startups or penny stock investments, community solar offers a simple and concrete product and business model—a solar array. Not only can community investors understand what they are investing in, they can verify the presence of a community solar project in their community. Moreover, instead of a promise for future profits evidenced by a paper stock certificate, community solar investors will promptly receive a tangible benefit in the form of utility bill credits. It is also notable that the issuance of such bill credits will necessarily entail oversight by state regulatory authorities, as the development of virtual net metering policies still requires state action. In short, the solicitation ban is both completely unnecessary in—and in fact highly detrimental to—the national community solar movement.

The proposal promoted herein would not require an overhaul of U.S. securities laws. On the contrary, the provisions endorsed herein expand upon and accelerate changes that are already in the process of occurring. For example, Congress has already provided an exemption from Blue Sky laws under Rule 506; thus an expansion of this principle to Rule 504 is surely feasible. Likewise, the JOBS Act was motivated by a desire to increase access to investment opportunities beyond venture capitalists, as well as to increase small businesses’ ability to obtain capital.²³³ In fact, the term “crowdfunding” is an acronym; it stands for “Capital Raising Online While Deterring Fraud and Unethical Non-Disclosure.”²³⁴ The proposed crowdfunding exemption therefore evidences Congress’s recognition that public solicitation and fraud prevention are not necessarily mutually exclusive. Pursuant thereto, the JOBS Act has also sought to relax the general solicitation ban—though only with respect to accredited investors.²³⁵ In light of

231. *Id.* (noting that 78 percent of Internet users report that they have conducted product research online).

232. *See id.* at 491–92.

233. *See* JOBS Act, H.R. 3606, 112th Cong. pmb. (2012) (declaring that the purpose of the JOBS Act is “[t]o increase American job creation and economic growth by improving access to the public capital markets for emerging growth companies”).

234. *See id.* § 301.

235. The Act specifically provides:

[T]he Securities and Exchange Commission shall revise its rules issued in [Rule 506] to provide that the prohibition against general solicitation or general advertising contained in section 230.502(c) of such title shall not apply to offers and sales of securities made pursuant to [Rule 506], *provided that all purchasers of the*

these developments, the proposal contained herein is merely a natural extension of this already-shifting landscape.

V. MEET THE PROJECTS

In light of the minefield posed by securities regulations, an obvious question at this point is, perhaps, how have community solar projects come to exist at all? This Part answers that question by surveying several of the most prominent community solar projects to date, an exploration which further highlights the difficulties posed by current securities regulations.

Let us start with one of the most financially successful projects—Maryland’s University Park Solar. This community solar array is comprised of a twenty-two-kW system that was financed exclusively by about thirty local residents and installed on the roof of a local church.²³⁶ In order to fund the project, the locals formed a private, for-profit LLC, called a “special purpose entity,” of which each investor was a member.²³⁷ As a result of tax savings and REC sales, the effective buy-in cost was reduced to \$2.27 per watt, meaning that each investor contributed somewhere between \$2000 and \$4000 for his or her share of the project.²³⁸ Uniquely, the University Park Solar project did not utilize virtual net metering, instead negotiating a deal to sell energy produced by the system to the local church that hosted the system at a rate of \$0.13 per kWh.²³⁹ The project was completed and came online in 2010, and project participants expect to recoup their initial investment in five years.²⁴⁰ Therefore all energy generated after 2015 will represent a return on the participants’ investment.

This project clearly satisfies all four elements of the investment contract test: Investors bought into a common enterprise with the expectation of profits (after five years) that would accrue from the efforts of a third party (the developer).²⁴¹ Project leaders therefore relied on Section 3(a)(11)’s intrastate exemption to circumvent federal registration.²⁴² It also appears that the project exploited an exemption under Maryland state law that mirrors Rule 506—exempting sales to

securities are accredited investors. Such rules shall require the issuer to take reasonable steps to verify that purchasers of the securities are accredited investors, using such methods as determined by the Commission.

Id. § 201(a)(1) (emphasis added).

236. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 9.

237. *Id.*

238. *Id.*

239. *Id.*

240. *Id.*

241. *See supra* notes 108–110 and accompanying text for the elements of an investment contract.

242. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 33.

not more than thirty-five persons that are accomplished without general solicitation.²⁴³ This required that solicitation for the project be conducted entirely by word of mouth, through preexisting relationships.²⁴⁴ The state of Maryland also required each member to complete a ten-page financial disclosure form.²⁴⁵ These exemptions allowed the project to avert the hundreds of thousands of dollars associated with securities compliance.²⁴⁶ Nevertheless, project founders admit that, had they not received substantial pro bono accounting and legal services, such costs could have “overwhelm[ed] any return to members.”²⁴⁷ And even with the combination of pro bono help and exemptions, the members spent \$12,000 on legal and accounting services.²⁴⁸

It is notable that the limitations on solicitation and the investor cap significantly reduce the replicability of this project. Moreover, because state exemptions vary, the exemption used by the University Park project might not be available to analogous projects in other states. Nonetheless, as a well-organized project that allows investors to profit for twenty-plus years, the University Park project is a paradigm of the private-market model for community solar. And this prototype has in fact been replicated by a private, Colorado-based company, the Clean Energy Collective, which has developed five for-profit community solar projects in Colorado, one in New Mexico, and one in Minnesota.²⁴⁹ Notably, these projects were preceded by Colorado’s decision to join the handful of states

243. Thus, even though the University Park project avoided the costs of full registration by restricting itself to in-state investors, the accessibility of the project was substantially limited in other ways, for example, the project was “allowed no more than 35 ‘unsophisticated’ (non-wealthy) investors, w[as] not allowed to advertise except by word of mouth . . . [and] each member [was required to] complete[] a 10-page financial disclosure form for the state of Maryland.” *Id.* By comparing this information with the available exemptions under Maryland state law, I determined that it is highly likely that University Park Solar relied on section 11-602(9) of the Maryland Corporations and Associations Code, which exempts

any offer or sale in a transaction involving the sale by an issuer to not more than 35 persons, other than [certain institutional investors], in this State during any period of 12 consecutive months, whether or not the seller or any purchaser is then present in this State, if the seller reasonably believes that all the purchasers in this State, other than those designated in item (8) of this section, are purchasing for investment, and if the securities have not been offered to the general public by advertisement or general solicitation.

MD. CODE ANN., CORPS. & ASS’NS § 11-602 (LexisNexis 2007).

244. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 33.

245. *Id.*

246. *Id.*

247. *University Park Community Solar LLC, Maryland*, NORTHWEST COMMUNITY ENERGY, http://nwcommunityenergy.org/solar/solar-case-studies/university_park (last visited Jan. 6, 2014).

248. *Id.*

249. *Frequently Asked Questions*, *supra* note 52.

that have passed community solar legislation, which became effective in 2010.²⁵⁰ Thus, with slight adjustments to securities regulations, this special purpose entity model offers mammoth market potential.

Not all community solar models, however, measure success in terms of profitability. Several community solar projects have instead relied on the nonprofit and utility-owned models, under which an installation is owned by a local nonprofit or by a publicly or privately held utility provider. These types of programs typically circumvent securities regulations altogether by charging customers a premium for solar energy—also known as green pricing—which eviscerates any expectations of profit. Unable to exploit tax credits or depreciation, a nonprofit community solar project receives funding from donors, grants, and special government-financing instruments called clean renewable energy bonds.²⁵¹

In Washington State, for example, the Ellensburg Community Solar Project—a fifty-eight kW solar array—was financed by the contributions of seventy-three individual donors, a local nonprofit organization, and several state government grants.²⁵² Although the individual donors will receive bill credits in proportion to their contributions, these credits will be insufficient to recoup even the donors' initial investments.²⁵³ Thus, this arrangement could be termed “pre-paid green pricing” as participants pay an upfront premium for the rights to twenty plus years of solar energy.²⁵⁴ Like in Colorado, this project was possible because, in 2009, the Washington legislature became one of the first states to pass community solar legislation.²⁵⁵ Sacramento's local utility—the Sacramento Municipal Utility District (SMUD)—offers a twist on this arrangement under their SolarShares program.²⁵⁶ Instead of actually purchasing a portion of SMUD's 1000-kW solar array, participants lease the rights to energy generated from the project. Customers pay a monthly fee—starting at \$10.75 a month—for bill credits representing the energy generated by the solar array.²⁵⁷ Because this monthly fee, on average, exceeds the value of the bill credits issued, participating customers in fact pay an average monthly premium of 9 percent over normal electricity rates.²⁵⁸

250. See H.B. 10-1342, 67th Gen. Assemb., 2d Reg. Sess. (Colo. 2010).

251. COUGHLIN ET AL., *supra* note 16, at 28.

252. FARRELL, COMMUNITY SOLAR POWER, *supra* note 21, at 15.

253. *Id.*

254. *Id.*

255. See S.B. 6170, 61st Leg., Reg. Sess. (Wash. 2009), amended by S.S.H.B. 1597, 61st Leg., Reg. Sess. (Wash. 2010) and S.B. 5526, 62d Leg., Reg. Sess. (Wash. 2011).

256. See *SolarShares FAQ*, *supra* note 121.

257. *Id.*

258. Connie Zheng notes the following:

By charging a premium, however, such programs reduce the attractiveness of community solar investment to consumers. With falling PV prices leading to energy parity in the nation's largest cities and with projects like University Park Solar offering a profitable community solar model, the prompt modification of securities laws is necessary to bring affordable solar access to the rest of the nation.

As these examples demonstrate, it is possible—though not always practicable—to develop a community solar project under the current securities framework. But the legality of some projects' securities practices is dubious. For example, some companies engage in online solicitation, the legality of which is dubious at best.²⁵⁹ As already discussed, Rules 504, 506, and even the possible crowdfunding exemption appear to ban general solicitation, with some limited exceptions when sales are made only to accredited investors.²⁶⁰ Although the intrastate exemption does not expressly ban general solicitation, it defers to state securities laws, which generally prohibit the same activities as federal law does. Recall also that any form of online advertising is deemed to constitute an offer to all fifty states.²⁶¹ Therefore, any company that employs online solicitation cannot rely on the intrastate exemption, because even a single offer to an out-of-state resident disqualifies the entire securities offering from being able to use Section 3(a)(11). In summary, all possible exemptions for which a community solar project might qualify effectively prohibit online solicitation. And, although some promoters' actions may be going unnoticed by the SEC, being found liable for violating securities laws can have both civil and criminal repercussions. Thus, promoters going forward should exercise caution to avoid engaging in general solicitation.

The lack of prosecution for general solicitation and other potential securities violations is likely attributable to a couple of factors. First, there have been no reports to date of the use of community solar projects as a vehicle for the perpetuation of fraud. Therefore, the SEC probably has more pressing bigger issues to address, and the localized, good-faith efforts of small community solar groups are unlikely to attract significant federal scrutiny. Second, a good portion of community solar projects are sponsored—either directly or indirectly—by state governments. The passage of statewide community solar legislation is typically

By adding on roughly 9 percent to customers' energy bills, however, the SolarShares program is still far from perfect. After all, it's primarily a way for those with an interest in solar—but who are ineligible for a rooftop array, for one reason or another—to opt into a system with great environmental impact.

Zheng, *supra* note 21.

259. Companies will remain unnamed, but are readily identifiable by a Google search.

260. See *supra* notes 165–172, 179, 183 and accompanying text for a discussion of the interactions between various exemptions and the ban on general solicitation.

261. See *supra* note 141 and accompanying text.

prerequisite to the deployment of community solar in a state.²⁶² Even private developers often work closely with states to formulate such legislation. Moreover, many projects are directly sponsored by state grants or owned by publicly held utility companies. These limited state resources are sufficient to support only a handful of projects; thus, states are likely able to monitor these projects fairly closely to ensure consumer protection. States are also less likely to be concerned about fraud when purported investors are in fact donors knowingly paying a premium for solar energy.

Nevertheless, because greater market demand will necessarily exist for a profitable model than for one that relies on sheer altruism, a publicly sponsored model almost certainly promises a slower rate of market penetration than a private model. The advent of the special-purpose-entity model therefore presents a double-edged sword: It provides market mechanisms to support the rapid proliferation of community solar, but the presence of a profit motive simultaneously creates a higher risk of fraudulent activity. On balance, however, this threat of fraud is insufficient to outweigh the benefits that would accrue from the free proliferation of privately held community solar. As demonstrated by this survey of existing projects, prompt action is greatly needed to curb the looming threat of liability for securities violations, which could jeopardize the progress that has already been set in motion.

CONCLUSION

Although the increasing cost-effectiveness of solar PV has started to erode earlier financial barriers, inflexible securities regulations continue to pose a formidable threat to the fledgling community solar model. While Congress has provided several narrowly circumscribed exemptions to securities compliance, the novelty of the community solar model does not lend itself to easy categorization into one of these exemptions. And though implemented to protect unsophisticated investors, the practical effect of securities regulations is to altogether exclude those investors from myriad benign investment opportunities. While this tradeoff may be worthwhile in other contexts, the risks and rewards of a community solar project are simple, consistent, and obvious. Thus, while investors would benefit from securities laws' antifraud provisions, the onerous registration

262. State legislation is often prerequisite to the development of community solar because it establishes virtual net metering, requires utilities to purchase energy generated, exempts community solar projects from regulation as a utility, and ensures compliance with FERC and PURPA's ratepayer indifference requirement. *See supra* note 22. See also *supra* notes 250, 255 and accompanying text for two examples of state community solar legislation.

and disclosure requirements are unnecessary and in fact detrimental—as they largely work to prevent communities from having the opportunity to invest in community solar at all.

Because the classification of community solar interests as investment contracts is very likely, developers must be cognizant of the myriad rules that are triggered by such a finding. For the time being, developers should seek to utilize a current exemption under Regulation D or under the Intrastate Exemption found in Section 3(a)(11). Because of the severe shortcomings of both of these options, however, legislatures should promptly take action to update antiquated securities regulations to recognize the realities of modern investment. States contemplating community solar legislation should amend their Blue Sky laws to ensure that projects that jump through hoops to obtain a federal exemption do not confront insurmountable barriers at the state level. On the federal level, the SEC should ensure that the regulations it promulgates to govern crowdfunding are not so burdensome as to nullify the purpose of the crowdfunding exemption. Similarly, Congress should reconsider a repeal of the nonsolicitation rule and an expansion of state law preemption with respect to Rule 504.

The explosion of solar energy is a global phenomenon. The emergence of the community solar model offers the United States a novel opportunity not only to increase the net societal benefits of solar energy by capitalizing on the declining costs of solar PV, but also to more equitably distribute those benefits to all Americans, regardless of socioeconomic status. Given the demonstrated superiority of community solar over other models of generation, it is time to lift archaic, paternalistic barriers and make solar energy a reality for all.