

IS COMMUNITY SOLAR REALLY A SECURITY?

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INTRODUCTION

Solar power is a leading element in the transition to low-carbon power.¹ In the U.S., booming solar development has focused on two primary markets: larger utility-scale solar farms, and smaller residential-scale rooftop installations.² Community-scale solar is a largely untapped market in the middle of this spectrum.³ One emerging mechanism to procure community-scale solar is the concept of shared solar, or community solar. Broadly, this concept involves a group of grid-connected electricity consumers, each with an interest in a solar facility or the power it produces. That interest is typically realized in the form of electricity bill credits tied to the output of the solar facility.⁴

However, this broad definition of community solar omits an important distinction. For many policymakers and advocates, community solar is more specifically motivated by energy justice—a potential to serve low-income communities and other vulnerable groups who bear the brunt of environmental damage associated with energy development, face a higher energy cost burden, and simultaneously have been locked out of many energy benefits.⁵ In the U.S., solar power provides a particularly recent and prominent example of this type of energy injustice. Distributed rooftop

1. See, e.g., *Renewables 2018*, INT'L ENERGY AGENCY, <https://www.iea.org/renewables2018/power/> (last visited Apr. 27, 2019) (noting that in 2017 renewable power capacity additions “accounted for more than two-thirds of global net electricity capacity growth,” with solar photovoltaic capacity outstripping other renewable technologies, and forecasting that under prevailing market and policy conditions solar power will continue to lead other technologies from 2018 to 2023).

2. ROCKY MOUNTAIN INST., COMMUNITY-SCALE SOLAR: WHY DEVELOPERS AND BUYERS SHOULD FOCUS ON THIS HIGH-POTENTIAL MARKET SEGMENT 2 (2016), <https://rmi.org/wp-content/uploads/2017/03/Shine-Report-CommunityScaleSolarMarketPotential-2016.pdf> [hereinafter Community-Scale Solar].

3. See *id.* at 6 (identifying approximately 750 gigawatts of long-term potential community-scale solar capacity across five customer types, including low- and moderate-income households, renters, and residential and commercial buildings with unsuitable roof space for rooftop solar).

4. See *infra* note 273 (describing the bill credit mechanism for community solar in Hawai'i).

5. See *infra* Part I.C (discussing community solar's potential as a tool for energy justice); Alice Kaswan, *Greening the Grid and Climate Justice*, 39 ENVTL. L. 1143, 1146 (2009) (“Emissions are disproportionately concentrated in disadvantaged areas since many of the most significant emissions sources, like refineries, power plants, transportation corridors, ports, and other industrial land uses, are located in poor and minority neighborhoods.”); Melissa Powers, *An Inclusive Energy Transition: Expanding Low-Income Access to Clean Energy Programs*, 18 N.C. J.L. & TECH. 540, 556–57 (2017) (discussing evidence showing that “[l]ow-income communities and households in the United States face a higher energy and transportation burden than their middle- and upper-income counterparts”); Shelley Welton, *Grid Modernization and Energy Poverty*, 18 N.C. J.L. & TECH. 565, 585–96 (2017) (describing various definitions and lines of evidence for energy poverty in the U.S.).

solar, for all its benefits, has been largely accessible only to single-family homeowners.⁶

The promise of community solar is rooted in its potential to expand solar access to other groups via innovative and flexible models that are designed to respond to community needs.⁷ But to realize that potential, a variety of implementation barriers and shortcomings must be addressed. In this context and others, the challenge of energy justice is the challenge of injecting justice principles into an energy realm typically dominated by technology and business considerations.

Securities laws aptly illustrate this challenge. A century after the operative definition of a security was born, the law continues to heft considerable uncertainty upon the scope of what constitutes a security.⁸ Applied to community solar, the complexity involved in managing that uncertainty tilts the field in favor of electric utilities and a century-old business model, over more modern community-focused energy initiatives.⁹

This Article deploys two tools to evaluate this securities uncertainty more closely. First, it moves the question of whether community solar is a security away from hypothetical scenarios and individualized project-by-project analyses. Instead, the question is evaluated in the context of Hawai‘i’s community solar program and tariff, recently approved by utility regulators.¹⁰ In renewable energy circles, Hawai‘i’s policy has earned the moniker a “postcard from the future.”¹¹ In hope that Hawai‘i’s story can provide useful lessons for other jurisdictions, Parts I and II provide details on how and why the State’s community solar program evolved, and how the securities issues arose in a way that threatened to limit the ability of community solar to innovate around energy justice principles.

In the Article’s second half, it reviews how the definition of a security has developed under federal and state securities laws (Part III). To add context, Part III also takes a new look at how energy development—in the form of “visionary oil wells” in Minnesota—may have injected uncertainty into the definition of a security at its inception.

6. See *infra* Part I.B (describing inequitable access to solar power).

7. See *infra* Part I.C.

8. See *infra* Part III (discussing the evolution of uncertainty in the definition of a security).

9. See *infra* notes 124–31 and accompanying text.

10. See *infra* Part I.D (describing the development of Hawai‘i’s community solar policy).

11. See, e.g., Herman K. Trabish, *What Comes After Net Metering: Hawai‘i’s Latest Postcard from the Future*, UTILITY DIVE (Oct. 22, 2015), <https://www.utilitydive.com/news/what-comes-after-net-metering-hawaiis-latest-postcard-from-the-future/407753/> (“Renewables policy issues in [Hawai‘i] are commonly referred to as postcards from the future because the high penetration of solar on the isolated island’s grid has forced the power sector into changes that many observers expect to hit the mainland in the coming years.”).

Through the lens of economic reality mandated by that definition, Part IV analyzes whether community solar is a security under Hawai‘i’s program framework. Hawai‘i again provides a suitable context for this question, because the State is home to a leading formulation of the risk capital test for determining whether a transaction involves a security.¹² Other jurisdictions use the federal test enunciated in *SEC v. W. J. Howey Co.*¹³ Community solar projects in Hawai‘i may be subject to both tests.¹⁴ Part IV focuses on applying the risk capital test, in part because prior analyses have not, in part because it overlaps substantially with the *Howey* test, and in part because some commenters assert that it is the broader test and thus more likely to ensnare community solar.

Unlike most prior analyses, this Article concludes that community solar interests are *unlikely* to be securities if they are part of a regulated utility tariff like Hawai‘i’s, and if one properly utilizes the concept of economic reality. Alas, that conclusion cannot resolve the uncertainty that appears to be embedded in the definition of a security. Moreover, this phenomenon may echo deeper into the transition to a low-carbon electricity grid, as access to other innovations becomes similarly mired in securities uncertainty.¹⁵

Ahead of those impacts, community solar presents an opportunity to use the securities definition to re-envision the boundary between electricity regulators and securities regulators, in a way that accounts for 21st century electricity innovations. That re-envisioning also presents an opportunity, in an admittedly incremental way, to operationalize energy justice principles in a manner that is replicable, long-lived, and responsive to the climate crisis.¹⁶

12. See generally Haw. Comm’r of Sec. v. Haw. Mkt. Ctr. Inc., 485 P.2d 105 (Haw. 1971) (adopting the risk capital test in Hawai‘i) [hereinafter *Hawaii Market Center*].

13. *SEC v. W. J. Howey Co.*, 328 U.S. 293, 301 (1946).

14. See *infra* notes 335–36 and accompanying text (describing the interplay between federal and state laws).

15. See *infra* notes 344–46 and accompanying text (describing the potential role of securities issues in a transactional electric grid).

16. The ties between community solar and energy justice are not the focus of this Article. Professor Shalanda Baker has eloquently discussed those ties—and gaps—elsewhere. Shalanda H. Baker, *Unlocking the Energy Commons: Expanding Community Energy Generation*, in *LAW AND POLICY FOR A NEW ECONOMY* 211, 223–27 (Melissa K. Scanlan ed., 2017) [hereinafter Baker, *Unlocking the Energy Commons*].

I. THE STORY OF COMMUNITY SOLAR IN HAWAII‘I

A. *The Rise of Rooftop Solar*

In the rooftop solar realm, Hawai‘i’s “postcard from the future” reputation is well-deserved. The State’s net energy metering tariff was launched by legislation in 2001.¹⁷ This sparked a run of exponential growth that lasted more than a decade, with a doubling or near-doubling of total installed rooftop solar capacity in nine of ten years following 2004.¹⁸ It is estimated that more than 30% of single-family homes in Hawai‘i generate rooftop solar power.¹⁹ Overall, rooftops and other distributed sites supply more than 80% of the State’s solar power.²⁰

The effects of this booming market rippled throughout the State’s energy sector and, indeed, its entire economy.²¹ At the height of the boom, solar installations reportedly accounted for more than a quarter of construction expenditures in the State.²² On O‘ahu, the State’s most

17. H.B. 173, 2001 Leg., 21st Sess. (Haw. 2001).

18. Data on installed capacity were obtained from HAWAIIAN ELEC. CO., INC., HAW. ELEC. LIGHT CO., INC. & MAUI ELEC. CO., LTD., HAWAIIAN ELECTRIC COMPANIES 2017 NET ENERGY METERING STATUS REPORT 1 (2018), <https://puc.hawaii.gov/wp-content/uploads/2018/03/NEM-HECO-2017.pdf>; see also Mark James et. al., *Planning for the Sun to Come Up: How Nevada and California Explain the Future of Net Metering*, 8 SAN DIEGO J. CLIMATE & ENERGY L. 1, 42 (2017) (“As of 2016, only [Hawai‘i] has reached the point where net metering displaces more than 2% of total generation.”).

19. See DAVID FELDMAN ET AL., NAT’L RENEWABLE ENERGY LAB., Q4 2017/Q1 2018 SOLAR INDUSTRY UPDATE 36 (2018), <https://www.nrel.gov/docs/fy18osti/71493.pdf> (“[Hawai‘i], California, and Arizona have residential systems on an estimated 31%, 11%, and 9% of households living in single-family detached structures.”).

20. See 2017 Renewable Portfolio Standard Status Report Hawaiian Electric Co., Inc. et al. at 3, *In re* Haw. Renewable Portfolio Standards Law, No. 2007-008 (Haw. Pub. Util. Comm’n Feb. 8, 2018) [hereinafter Renewable Portfolio Report], <https://puc.hawaii.gov/wp-content/uploads/2018/02/RPS-HECO-2017.pdf> (reporting 142,868 megawatt hours of photovoltaic and thermal solar generation, and 862,638 megawatt hours of customer-sited grid-connected generation); Kauai Island Utility Cooperative Renewable Portfolio Standards (RPS) Status Report at Exhibit A, No. 2007-008 (Haw. Pub. Util. Comm’n Mar. 3, 2018), <https://puc.hawaii.gov/wp-content/uploads/2018/04/RPS-KIUC-2017.pdf> (reporting 69,502 megawatt hours of generation from various utility-scale solar projects and 50,994 megawatt hours of generation under various distributed solar tariffs).

21. See generally HAW. STATE ENERGY OFFICE, HAW. DEP’T OF BUS., ECON. DEV. & TOURISM, HAWAII ENERGY FACTS & FIGURES 20 (2013), http://energy.hawaii.gov/wp-content/uploads/2011/10/EnergyFactFigures_Nov2013.pdf (describing a variety of metrics and impacts related to renewable energy development in Hawai‘i).

22. See *id.* at 13 (“Rooftop distributed solar has become one of the state’s leading industries, accounting for almost 26% of all construction expenditures in 2012.”). This estimate is apparently derived from reported solar building permit values, as a percentage of total building permit values. Since reaching a high of 29% in 2012, this value fell to 14.4%, 10.2%, and 5.6% in 2015, 2016, and 2017, respectively. *Solar-Related Construction Expenditures*, DATA.HAWAII.GOV, <https://data.hawaii.gov/dataset/Solar-Related-Construction-Expenditures-value-of-s/ja28-jmt2> (last visited Apr. 27, 2019).

populous island and home to the primary metropolitan center, distributed solar provides more grid electricity than any other source of renewable power.²³ Meanwhile, the State's oil imports for electricity generation are falling, down nearly 30% since 2006.²⁴

Framed another way, rooftop solar has become a driving force in a rapidly evolving renewable energy revolution.²⁵ Most states have adopted renewable portfolio standards, mandating that electric utilities shift toward renewable energy.²⁶ In Hawai'i, the first U.S. state to adopt a 100% renewable portfolio standard, private installations of rooftop solar are a key source of energy enabling the public utility to satisfy this obligation.²⁷ In this light, the rooftop solar boom reveals a remarkable, and remarkably unplanned,²⁸ evolution in the role electricity consumers play in driving the transition to low-carbon power.

Moreover, rooftop solar has helped to push forward a new paradigm for ensuring that electric utilities heed the public interest. In the short term, rooftop solar injects an aspect of competition that can help to address fundamental asymmetries between the interests of investor-owned utilities

23. See Renewable Portfolio Report, *supra* note 20 (showing that in 2017 Hawaiian Electric's customer-sited, grid-connected renewable generation accounted for 605,502 megawatt hours, compared to the next highest source, biomass, at 381,138 megawatt hours).

24. See HAW. DEP'T OF BUS., ECON. DEV. & TOURISM, MONTHLY ENERGY TRENDS, http://files.hawaii.gov/dbedt/economic/data_reports/energy-trends/Monthly_Energy_Data.xlsx (last visited Apr. 27, 2019) (reporting 12,237,023 barrels of oil consumed for electricity in 2006, compared to 8,880,040 in 2017).

25. See, e.g., Joel B. Eisen & Felix Mormann, *Free Trade in Electric Power*, 2018 UTAH L. REV. 49, 53, 70 (2018) (illustrating some of the ways that the proliferation of rooftop solar can transform the electrical market).

26. See GALEN BARBOSE, LAWRENCE BERKELEY NAT'L LAB., U.S. RENEWABLE PORTFOLIO STANDARDS 2018 ANNUAL STATUS REPORT 6 (2018), http://eta-publications.lbl.gov/sites/default/files/2018_annual_rps_summary_report.pdf (summarizing mandatory renewable portfolio standards in 29 states, covering more than half of U.S. electricity sales).

27. See HAW. REV. STAT. § 269-92 (Supp. 2017) (mandating a 100% renewable portfolio standard by December 2045); Press Release from the Governor of Hawai'i, Governor Ige Signs Bill Setting 100 Percent Renewable Energy Goal in Power Sector (Jun. 8, 2015), <https://governor.hawaii.gov/newsroom/press-release-governor-ige-signs-bill-setting-100-percent-renewable-energy-goal-in-power-sector/> (announcing the adoption of the State's 100% renewable portfolio standard).

28. In a 2008 agreement intended to help move the State "move decisively and irreversibly away from imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency," the utilities and state agencies targeted 23 megawatts of net metering rooftop solar capacity for the island of Oah'u by 2015. ENERGY AGREEMENT AMONG THE STATE OF HAWAII'I, DIVISION OF CONSUMER ADVOCACY OF THE DEPARTMENT OF COMMERCE & CONSUMER AFFAIRS, AND HAWAIIAN ELECTRIC COMPANIES 1, 45 (Oct. 2008) (on file with author). This target under-predicted the actual capacity by an order of magnitude. See HAWAIIAN ELECTRIC COMPANIES 2015 NET ENERGY METERING STATUS REPORT (2016), <https://puc.hawaii.gov/wp-content/uploads/2013/07/NEM-HECO-2015.pdf> (reporting 258 megawatts installed through 2015).

and the interests of the public.²⁹ In the long term, the rise of the utility “prosumer” may radically re-shape the energy system, moving from a unidirectional hierarchy molded by top-down decisions from utilities and regulators, toward a more distributed and democratic model in which consumers (who are also producers) are more deeply involved in energy decisions.³⁰

B. The Stark Reality of Inequitable Access to Solar Power

Hawai‘i’s rooftop solar boom was fueled by a variety of factors. Federal and state tax benefits,³¹ a *plug-and-play* net metering policy that made it easier to understand the implications of installing residential rooftop solar,³² and strong public sentiment in favor of solar power³³ all undoubtedly played a role. In 2015, Hawai‘i became the first state to shutter its net metering program,³⁴ partly in response to concerns voiced over the

29. See generally Order 32052 at Exhibit A: Commission’s Inclinations on the Future of Hawai‘i’s Electric Utilities, *In re* Integrated Resource Planning, No. 2012-0036 (Haw. Pub. Util. Comm’n Apr. 28, 2014). The Commission noted that “[w]ith the growth of utility-scale and distributed renewable resources, [Hawai‘i’s] electricity system is changing at an unprecedented pace and scale.” *Id.* at 6. The Commission identified the role of distributed solar generation in challenging “fundamental tenets of the long-standing regulatory compact,” and discussed technical, market, and public policy changes related to “better align[ing] the [utility companies’] business model with customers’ interests and public policy goals.” *Id.* at 27, 29.

30. See *id.* at 16–17 (describing the utilities’ role in the evolving landscape of renewable energy); see also Eisen & Mormann, *supra* note 25, at 53 (describing an energy market model in which distributed resources are transformed “from a marginalized locus to the center stage on which the future of the electricity sector will be decided”); Shelley Welton, *Clean Electrification*, 88 U. COLO. L. REV. 571, 584–85 (2017) [hereinafter Welton, *Clean Electrification*] (describing a “vision that regulators have for transforming passive ‘ratepayers’ into active ‘participants’ in the fight against climate change”).

31. See 26 U.S.C. § 48(a)(2)(A)(i)(II) (Supp. 2018) (providing a 30% federal investment tax credit for solar photovoltaic installations); HAW. REV. STAT. § 235-12.5 (2018) (providing a 35% state investment tax credit for solar photovoltaic installations). In 2015, Congress extended the residential solar investment tax credit beyond 2017, while establishing a phase out of the credit to occur in 2022. See Consolidated Appropriations Act of 2016, Pub. L. No. 114-113, § 303, 129 Stat. 2242, 3039 (2016).

32. HAW. REV. STAT. § 269-102 (2018). *But see* Heather Payne, *A Tale of Two Solar Installations: How Electricity Regulations Impact Distributed Generation*, 38 U. HAW. L. REV. 131, 160–61 (2016) (illustrating that while net energy metering is perceived as simple from the consumer standpoint, and that this simplicity is a critical component of consumer uptake, a number of policy choices embedded within net energy metering regulations actually make it much more complex than often perceived).

33. See UNIV. OF HAW. CTR. ON THE FAMILY, PUBLIC ATTITUDES ABOUT RENEWABLE ENERGY IN HAWAI‘I 4 (2014), http://uhfamily.hawaii.edu/publications/brochures/9314e_14101012_COF_RenewableEnergy_Report-FINAL.pdf (reporting that 92% of poll respondents responded that solar power is “a good idea for Hawai‘i,” a higher percentage than any of the other polled energy sources).

34. See Decision and Order No. 33,258, Instituting a Proceeding to Investigate Distributed Energy Resource Policies at 163 (No. 2014-0192) (Haw. Pub. Util. Comm’n Oct. 12, 2015) (“[T]he [net

potential for unfair cost-shifting in favor of utility customers with residential rooftop solar, to the detriment of non-participating utility ratepayers.³⁵ Perhaps even more than other solar-intensive jurisdictions, this solar fairness debate in Hawai‘i lacked a quantitative evaluation of the full range of benefits and costs associated with rooftop solar.³⁶ Moreover, Hawai‘i’s debate suffered by conflating a “cost-shifting” rhetoric with the more pertinent concept of paying one’s fair share.³⁷ As a result, Hawai‘i’s net metering debate and the ongoing evolution of the residential rooftop

metering] program for the HECO Companies’ service territories is fully subscribed. Therefore, applications submitted after the date of this Order shall not be eligible for the [net metering] program.”).

35. See, e.g., *id.* at 42 (recounting the Consumer Advocate’s position that net metering and similar tariffs result in a cost-shift to non-participants because fixed costs are not fully recovered from participants). It appears that the Commission did not adopt a position on this cost-shift assertion, finding only that “to the extent there is a negative impact to non-participating customers from current DER policy design, the interim options approved and ordered herein will alleviate that impact.” *Id.* at 166.

36. See, e.g., ROCKY MOUNTAIN INST. ELECTRICITY INNOVATION LAB, A REVIEW OF SOLAR PV BENEFIT & COST STUDIES 22 (2d ed. 2013), https://rmi.org/wp-content/uploads/2017/05/RMI_Document_Repository_Public-Reperts_eLab-DER-Benefit-Cost-Deck_2nd_Edition131015.pdf (summarizing 16 cost-benefit factors from various jurisdictions in the U.S., each utilizing a different mix of assumptions and considerations, and thus reaching a range of differing results; some studies found a net benefit to distributed generation tariffs and some found a net cost); see also VT. PUB. SERV. DEP’T, EVALUATION OF NET METERING IN VERMONT CONDUCTED PURSUANT TO ACT 99 OF 2014 at 17, Exhibit 10 (Nov. 7, 2014) (finding a net benefit associated with a typical residential net metering installation).

37. See Jon Wellinghoff & James Tong, *Wellinghoff and Tong: A Common Confusion Over Net Metering is Undermining Utilities and the Grid*, UTILITY DIVE (Jan. 22, 2015), <https://www.utilitydive.com/news/wellinghoff-and-tong-a-common-confusion-over-net-metering-is-undermining-u/355388/>. Former Chair of the Federal Energy Regulatory Commission Jon Wellinghoff and his co-author James Tong have eloquently warned against conflating these two concepts:

Critics assert [net metering] customers use the grid but do not pay their fair share of the costs. They say that [net metering] shifts grid costs to non-solar ratepayers, especially lower-income households and minorities. . . . “Nonsense,” reply [net metering] advocates. “[Net metering] critics don’t care about ratepayer fairness – they care about protecting profits and monopolies for utilities that have never faced competition.” They contend that, far from shifting costs, [net metering] customers create net value to the grid and all grid users. One only need look to a study commissioned by the neutral Nevada Public Utility Commission that shows [net metering] customers provide a net present value benefit of \$36M to non-[net metering] customers in Nevada. However, both arguments miss the point. That is because both use “cost-shifting” and “not paying the fair share” interchangeably. This understanding is wrong – critically wrong. And it is resulting in needlessly fractious debates and bad policies, including arbitrary fixed fees on solar customers.

Id. Wellinghoff and Tong used a net metering benefit-cost study commissioned by the California Public Utilities Commission to illustrate their point, noting that the report found a net cost-shift in favor of net metering customers, while simultaneously finding that, on average, solar customers paid 103% of their cost-of-service (averaged between residential and non-residential customers). *Id.* (discussing ENERGY + ENVIRONMENTAL ECONOMICS, INC., CALIFORNIA NET ENERGY METERING RATEPAYER IMPACTS EVALUATION 10, tbl. 5 (2013), http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/NEMReportwithAppendices.pdf).

solar market have fewer lessons for other jurisdictions than the “postcard from the future” label might suggest.

However, in at least one respect, the rooftop solar boom in Hawai‘i and elsewhere was indisputably inequitable. More than a third of occupied housing units in Hawai‘i are located in multi-unit dwellings such as condominiums, rather than single-family homes.³⁸ Without a roof of one’s own it is difficult, and often impossible, for residents of multi-unit dwellings to install solar panels. Nationally, it is estimated that “[h]alf of America’s population cannot participate in the solar revolution because they either live in a home that cannot support a solar array or rent an apartment.”³⁹

To illustrate the starkness of this differential access, consider Honolulu, Hawai‘i’s most populous county (which similarly has about half of its population living in multi-unit buildings).⁴⁰ Approximately 97% of Honolulu’s residential solar building permits issued through June 2017 were for single-family homes.⁴¹ This cries out for a policy response.⁴²

C. The Potential of Community Solar as a Tool for Energy Justice

Distributed solar’s imbalance toward single-family homes reflects an array of broader social disparities such as income, home ownership, and other factors that solar power cannot address in isolation.⁴³ But the concept

38. U.S. CENSUS BUREAU, 2013-2017 AMERICAN COMMUNITY SURVEY 5-YEAR ESTIMATES, HAWAI‘I, [https://factfinder.census.gov/bkmk/cf/1.0/en/county/Honolulu County, Hawaii/HOUSING](https://factfinder.census.gov/bkmk/cf/1.0/en/county/Honolulu%20County,%20Hawaii/HOUSING) (follow “Physical Housing Characteristics for Occupied Housing Units” hyperlink) (last visited Apr. 27, 2019) [hereinafter ACS HOUSING DATA].

39. Kevin B. Jones & Mark James, *Distributed Renewables in the New Economy: Lessons from Community Solar Development in Vermont*, in *LAW AND POLICY FOR A NEW ECONOMY* 189, 201 (Melissa K. Scanlan ed., 2017).

40. See ACS HOUSING DATA, *supra* note 38 (showing that in 2017 Honolulu County had over 150,000 occupied housing units in multi-unit buildings, out of approximately 311,000 total occupied housing units).

41. See, e.g., RES. & ECON. ANALYSIS DIV., HAW. DEP’T BUS., ECON. DEV. & TOURISM, SOLAR PV INSTALLATIONS IN HONOLULU: AN ANALYSIS BASED ON BUILDING PERMIT DATA 2, tbl. 1 (2017), http://files.hawaii.gov/dbedt/economic/data_reports/Solar_PV_Installation_In_Honolulu_Sep2017.pdf (reporting that, through June 2017, 53,869 of 55,288 total residential solar building permits were issued for single-family homes); see also Act 100, S.B. 1050, 2015 Leg., 28th Sess. (Haw. 2015) (“While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, and other impediments.”).

42. Although one might expect the ratio of single-family to multi-family permits to be some multiple greater than one—reflecting, perhaps, the average number of units in multi-family dwellings—a ratio of 97:1 is plainly skewed.

43. See Makena Coffman et al., *Determinants of Residential Solar Photovoltaic Adoption* 3, 15–17 (Univ. Haw. Econ. Research Org., Working Paper No. 2018-1), http://www.uhero.hawaii.edu/assets/WP_2018-1.pdf (finding that owner-occupancy rates, prevalence of

of equitable access—a fundamental principle of energy justice⁴⁴—is squarely within the realm of regulated electricity systems.⁴⁵ In Hawai‘i and elsewhere, community solar arose directly from the need to improve the equity of solar access.

In 2015, the same year that Hawai‘i adopted a 100% renewable portfolio standard, Act 100 launched the State’s community-based renewable energy program.⁴⁶ The same concept has sprung up around the country with a variety of names, such as shared solar, neighborhood net metering, and community solar gardens. Each of the labels connotes the same general concept—a mechanism for utility customers to gain credit on their electric bill, from power generated by solar panels installed somewhere other than their own roof.⁴⁷ I will collectively describe these programs using the label *community solar*.⁴⁸

single-family residences, and income are the “most influential” demographic factors explaining the differences in solar adoption between census tracts). Professor Coffman and her co-authors observed the particular importance of owner-occupancy in relation to solar access: “Owner-occupancy is particularly important because landlords and renters suffer from what is referred to as a ‘principal-agent’ problem, where renters lack autonomy over decision-making regarding capital investments and landowners face a disconnect between cost and benefits of capital investments in rental assets.” *Id.* Other factors are also related to solar access, such as income, roof orientation and shading, and customers living on circuits saturated with existing solar installations. Less technical factors, such as race, also play a role. *See, e.g.,* Deborah A. Sunter et al., *Disparities in Rooftop Photovoltaics Deployment in the United States by Race and Ethnicity*, 2 NATURE SUSTAINABILITY 71, 73 (2019) (finding that disparity in rooftop solar distribution remains even after accounting for differences in household income and home ownership).

44. *See, e.g.,* Shalanda H. Baker, *Mexican Energy Reform, Climate Change, and Energy Justice in Indigenous Communities*, 56 NAT. RESOURCES J. 369, 379 n.72 (2016). Professor Baker provides this brief introduction to energy justice principles:

Lakshman Guruswamy was one of the first to define energy justice, framing energy justice as a moral obligation to ensure that those who lack access to clean energy, the energy poor, have access to clean energy technologies that limit exposure to harmful indoor pollutants . . . In the intervening years, energy justice has evolved to incorporate principles of climate justice, environmental justice, and energy democracy.

Id. (citations omitted); *see also* Kirsten Jenkins et al., *Humanizing Sociotechnical Transitions Through Energy Justice: An Ethical Framework for Global Transformative Change*, 117 ENERGY POL’Y 66, 67 (2018) (describing the core notions of energy justice as the “‘three A’s’ of availability, accessibility and affordability”).

45. *See, e.g.,* William Boyd, *Public Utility and the Low-Carbon Future*, 61 UCLA L. REV. 1614, 1643 (2014) (describing the core of the regulatory compact: “In return for an exclusive franchise, the right of eminent domain, and an ability to sell electricity at reasonable rates, electric utilities would provide reliable, universal service . . .”).

46. Act 100, S.B. 1050, 2015 Leg., 28th Sess. (Haw. 2015).

47. *See infra* note 273 (describing the bill credit mechanism).

48. This terminology is selected as a matter of convenience and familiarity. However, it should be noted that Hawai‘i’s “community-based renewable energy tariff” is open to other forms of renewable generation, in addition to solar. *See* HAW. REV. STAT. § 269-27.4 (2018) (defining the “community-based renewable energy tariff,” without limiting eligible renewable technologies); HAW. REV. STAT.

Hawai‘i’s community solar legislation was expressly aimed at addressing the solar access problem:

While residential solar energy use has grown dramatically across the State in recent years, many residents and businesses are currently unable to directly participate in renewable energy generation because of their location, building type, access to the electric utility grid, and other impediments. *The [community solar] program seeks to rectify this inequity by dramatically expanding the market for eligible renewable energy resources to include residential and business renters, occupants of residential and commercial buildings with shaded or improperly oriented roofs, and other groups who are unable to access the benefits of onsite clean energy generation.* The legislature finds that it is in the public interest to *promote broader participation* in self-generation by [Hawai‘i] residents and businesses through the development of [community solar] facilities in which participants are entitled to generate electricity and receive credit for that electricity on their utility bills.

...

The purpose of this Act is to establish the [Hawai‘i] community-based renewable energy program to *make the benefits of renewable energy generation more accessible* to a greater number of [Hawai‘i] residents.⁴⁹

Community solar projects developed at any size might provide some of these accessibility benefits, including larger utility-scale solar projects that may be (almost incidentally) marketed as community solar to a wide array of consumers.⁵⁰ But the true promise of community solar as a tool to expand accessibility and promote justice is more likely found in models that focus on existing community networks, such as apartment buildings, low-income housing developments, church congregations, or other community groups.⁵¹ These projects are more likely to be driven by community-focused

§ 269-91 (2018) (defining “renewable energy” to include power derived from wind, the sun, falling water, biogas, geothermal sources, ocean water, currents, and waves, biomass, biofuels, and hydrogen produced from renewable energy sources).

49. Act 100, S.B. 1050 (emphasis added).

50. See generally Welton, *Clean Electrification*, *supra* note 30 (analyzing the contours of energy justice and a more participatory grid).

51. See *id.* at 581 (“The history of electrification counsels that our most successful grid experiments in terms of equity and empowerment may come from focusing on more collective forms of

motives and objectives, to serve the needs of a real community, and to empower community decision making on energy infrastructure.⁵²

These community-focused community solar projects are also likely to be developed at community-scale.⁵³ To date, solar development programs have typically focused on the two ends of the scale spectrum: large utility-scale solar farms and small behind-the-meter distributed generation.⁵⁴ Observers note the massive potential for solar power in the middle of this spectrum.⁵⁵ Under traditional utility programs, community-scale solar developments may not be able to bear transactional costs and processes associated with utility-scale solar projects, nor can they always qualify for the *plug-and-play* distributed generation tariffs that have been successful in the residential rooftop solar market.⁵⁶ The concept of community solar

grid participation. Thus, regulators might pay particular attention to programs like community solar and micro-grid formation for the community-scale participation that they embody.”).

52. *Id.*; see also Baker, *Unlocking the Energy Commons*, *supra* note 16 (criticizing the community solar models advanced by most states for “leav[ing] ‘community’ out of the equation,” and explaining the advantages of community energy projects that are more integrally tied to low-income and vulnerable communities); see also Welton, *Clean Electrification*, *supra* note 30, at 581 (“The history of electrification counsels that our most successful grid experiments in terms of equity and empowerment may come from focusing on more collective forms of grid participation. Thus, regulators might pay particular attention to programs like community solar and micro-grid formation for the community-scale participation that they embody.”); cf. Shelley Welton, *Public Energy*, 92 N.Y.U. L. REV. 267, 338–43 (2017) [hereinafter Welton, *Public Energy*] (arguing in favor of local ownership and control over electric utilities, to allow for benefits such as flexibility, experimentation, and altruistic sorting, and to create a mechanism for local communities to influence a “larger, dynamic national conversation about our role as local and global citizens in an era of significant climate disruption”). *But see* Powers, *supra* note 5, at 555–56, 559–61 (2017) (acknowledging that community solar may be able to improve access to solar power, but expressing skepticism that it can deliver broader benefits to large numbers of low-income communities, particularly for programs that rely on carve-outs for low-income participation).

53. See Community-Scale Solar, *supra* note 2, at 1 (providing that community-scale solar is inclusive and accessible to low-income groups).

54. *Id.* at 2.

55. *Id.* at 6 (estimating community-scale solar market potential at more than 750 gigawatts across five customer classes: low- to middle-income renters, other renters including in multi-unit dwellings, multi-unit dwelling non-renters, single-family homes with unsuitable roof space for rooftop solar, and commercial buildings with unsuitable roof space for rooftop solar).

56. *But see* KEVIN BREHM ET AL., ROCKY MOUNTAIN INSTITUTE, PROGRESS AND POTENTIAL FOR COMMUNITY-SCALE SOLAR: HOW RURAL ELECTRIC COOPERATIVES CAN USE LOW-COST, DISTRIBUTED ENERGY TO SAVE MONEY, SERVE CUSTOMERS, AND UNLOCK BILLIONS IN INFRASTRUCTURE SPENDING 6 (2018), <https://rmi.org/insight/progress-potential-community-scale-solar/> (“[Community-scale solar] is large enough to leverage the economies of scale enjoyed by utility-scale solar systems, so it can be developed at costs that are highly competitive with renewable and nonrenewable power generation. Like behind-the-meter solar, community-scale solar can be flexibly located and can provide distributed benefits including avoided transmission energy line losses, deferral of distribution infrastructure upgrades, and increased resilience.”).

offers a revenue mechanism, and a revenue-sharing mechanism, to unlock the middle of the market.⁵⁷

Depending on context and program design, community solar might offer other benefits too. For example, experience with community solar in New York and Vermont suggests that community solar can be more cost-effective than other solar installations of a similar size.⁵⁸ Cost benefits associated with community solar may come from several directions. For example, in the distributed solar industry, customer acquisition is a substantial cost component.⁵⁹ Developers assert that the cost of customer acquisition is also significant for community solar, and that it represents an incremental cost in comparison to solar farms operating under more traditional utility power-purchase agreements.⁶⁰ Community solar can lower

57. See, e.g., Jones & James, *supra* note 39, at 206 (describing the revenue mechanism available under Vermont's group net metering program).

58. ROBERT MARGOLIS, NAT'L RENEWABLE ENERGY LAB, Q1/Q2 2018 SOLAR INDUSTRY UPDATE 36 (2018), <https://www.nrel.gov/docs/fy18osti/72036.pdf> ("Since the start of 2016, 16 community solar projects have reported pricing in New York, with average rates substantially lower than other PV systems in New York of comparable size."); Jones & James, *supra* note 39, at 206–07 (discussing a Vermont case study and noting that "[t]he community owned solar model brings economy of scale savings to a project without having to rely on third-party financing"). As in Hawai'i, New York's regulators established community solar with a focus on accessibility. See, e.g., Order Establishing a Community Distributed Generation Program and Making Other Findings, Proceeding on the Motion of the Commission as to the Policies, Requirements and Conditions for Implementing a Community Net Metering Program at 3, No. 15-E-0082 (N.Y. Pub. Serv. Comm'n Jul. 17, 2015) ("As many of the commentators note, the purpose of Community DG is to open opportunities for participation in solar and other forms of clean distributed generation to utility customers that would not otherwise be able to access that generation directly.").

59. Industry customer acquisition costs are proprietary and not widely shared. However, the author's interactions with solar industry insiders, and other sources, suggest that it can be a substantial cost component for rooftop solar. See Bryan Bollinger & Kenneth Gillingham, *Peer Effects in the Diffusion of Solar Photovoltaic Panels*, 31 *MARKETING SCI.* 900, 910 (2012) (describing, without citation, the "high cost of consumer acquisition in the solar PV market"); see also Eric Wesoff, *Costs to Acquire US Residential Solar Customers Are High and Rising*, *GREEN TECH. MEDIA* (July 6, 2017), <https://www.greentechmedia.com/articles/read/costs-to-acquire-us-residential-solar-customers-are-high-and-rising> (describing high acquisition costs reported by an industry analyst).

60. See Joint Responses to Pub. Util. Comm'n's Information Requests at 2, *In re Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop., Community-Based Renewable Energy Program and Tariff*, No. 2015-0389 (Haw. Pub. Util. Comm'n Nov. 16, 2016) [hereinafter Joint Responses]. This coalition of industry and nonprofit groups described a variety of the costs components related to developing community solar, and asserted:

A critical factor that needs to be considered in developing the credit rates for this program is the incremental cost associated with a community solar project. While economies of scale can be leveraged with community solar, the cost and effort associated with customer acquisition is not insignificant. This can involve market research; marketing; individual customer outreach and responding to questions; and ultimately contract negotiations. These represent the greatest incremental costs involved in a community solar project.

Id.

these costs by leveraging peer effects and communication channels in an existing community network.⁶¹ Reducing the energy cost burden is an important component of the energy justice framework.⁶² Opportunities for reducing energy costs should not be overlooked.

Energy justice issues are also centrally embedded within the question of where to site energy infrastructure.⁶³ Community-sited community solar, where the community hosting a project and the community benefitting from a project overlap, can empower self-determination and procedural justice in these siting issues.⁶⁴ In addition to this project-by-project siting benefit, community solar appears poised to help address quietly burbling questions about optimal land use in the broader transition to renewable energy.⁶⁵ Those questions will be particularly prevalent in a place like Hawai‘i, which is contemplating substantial future greenfield utility-scale solar development, on an inherently limited land area, to achieve its renewable portfolio standard.⁶⁶ Successfully siting community-scale solar projects can relieve some of the pressure to rely on large-scale greenfield development.

61. See Jones & James, *supra* note 39, at 207 (noting that “[b]ecause of the reduced customer acquisition costs and other economy of scale savings, the [community solar] model is attractive to local solar installers who have been able to build these projects for over a dollar per watt less than residential rooftop projects”); see also Bollinger & Gillingham, *supra* note 59 (describing “strong evidence for causal peer effects” in the adoption of distributed solar power).

62. See generally Powers, *supra* note 5, at 544–45 (noting that low-income community members often lack the resources to participate in new electricity markets like community solar); Joint Responses, *supra* note 60 (“This [cost of marketing, customer acquisition, and customer service] is a particularly important cost component when incorporating certain segments of the customer base such as the Staff Proposal’s requiring 40% of each project to be allocated to individual customers less than 50 kW in size, and a 5% capacity allocation for low-to-moderate income customers.”).

63. See, e.g., Benjamin K. Sovacool & Michael H. Dworkin, *Energy Justice: Conceptual Insights and Practical Applications*, 142 APPLIED ENERGY 435, 437 (2015) (discussing the use of energy justice as an analytical tool, and asserting that “[f]ree, prior, informed consent becomes an essential part of due process and the siting of energy infrastructure”).

64. See generally Phillip Roddis et al., *The Role of Community Acceptance in Planning Outcomes for Onshore Wind and Solar Farms: An Energy Justice Analysis*, 226 APPLIED ENERGY 353 (2018); Maarten Wolsink, *Wind Power Implementation: The Nature of Public Attitudes: Equity and Fairness Instead of ‘Backyard Motives,’* 11 RENEWABLE & SUSTAINABLE ENERGY REV. 1188, 1203 (2007) (describing the role of fairness and equity in forming perceptions about the suitability of siting for wind power facilities).

65. Cf. Rebecca R. Hernandez et al., *Solar Energy Development Impacts on Change and Protected Areas*, 112 PROC. NAT’L ACAD. SCI. 13579, 13579, 13583 (Nov. 3, 2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4640750/pdf/pnas.201517656.pdf> (assessing the impact of utility-scale solar development on land cover and the alteration of natural ecosystems).

66. See, e.g., Order No. 35286 Approving the Hawaiian Electric Companies’ Proposed Final Variable Requests for Proposals, With a Modification, *In re* the Requests of Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., and Maui Elec. Co., Ltd. to Institute a Proceeding Relating to Competitive Bidding Process to Acquire Dispatchable and Renewable Generation, No. 2017-0352 (Haw. Pub. Util. Comm’n Feb. 20, 2018) (approving a utility request for proposals to obtain renewable energy, consistent with a plan to install 400 megawatts of renewable generating capacity by 2021).

Enabling a community to generate a portion of its own power may induce other ripple effects. For example, it seems likely that a community of solar participants, once they are joined together in generation, will be particularly fertile ground for engaging participants in efficiency programs, aggregated demand response programs, or other initiatives.⁶⁷

D. Hawai'i's Transition from Policy to Implementation

Acknowledging the need for a regulatory process to move community solar beyond conceptual potential benefits, Act 100 provided guidelines for implementation.⁶⁸ This legislative guidance underscored the Act's focus on equity, envisioning "an open and accessible" regulatory process with a variety of participating stakeholders.⁶⁹ It also addressed the tension between utility-centric models of community solar that might operate more like utility-scale solar generation and models that might operate more like distributed generation. The legislature instructed that the program should "accommodate a variety of [community solar] projects, models, and sizes."⁷⁰

With the community solar program conceived, thus began a long regulatory gestation period. This included the submission of competing proposed tariffs by the utility and stakeholders,⁷¹ two proposed frameworks from the staff of the Public Utilities Commission,⁷² a (relatively rare)

67. *Cf.* Bollinger & Gillingham, *supra* note 59, at 911 (asserting that peer effects "are also likely to apply to the diffusion of other visible green technologies, such as hybrid vehicles, electric vehicles, geothermal heating, and outdoor high-efficiency lighting").

68. Act 100, S.B. 1050, 2015 Leg., 28th Sess. (Haw. 2015).

69. *Id.*

70. *Id.* Act 100 further underscores the legislature's intent to spur new models of energy development by specifying that "[a]ny person or entity may own or operate an eligible community-based renewable energy project or projects provided that the person or entity complies with all applicable statutes, rules, tariffs, and regulations governing the ownership and interconnection of such project or projects." *Id.*

71. Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd.'s Transmittal, *In re* Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop., No. 2015-0389 [hereinafter HECO Transmittal] (Haw. Pub. Util. Comm'n Oct. 1, 2015); Motion to Intervene by Ulupono Initiative LLC at Exhibit A, *In re* Application of Hawaiian Elec. Co. Inc., Haw. Elec. Light Co. Inc., Maui Elec. Co. Ltd., & Kauai Island Utility Coop., No. 2015-0389 (Haw. Pub. Util. Comm'n Dec. 17, 2015) (attaching, as Exhibit A, a proposed community solar program structure).

72. Order No. 33751 Admitting Intervenor and Participants, Seeking Clarification Regarding the Stakeholders' Community-Based Renewable Energy Proposal, and Providing "Draft Haw. P.U.C. Staff Proposal for Community-Based Renewable Energy Program" for Review and Comment, *In re* Application of Hawaiian Elec. Co. Inc., Haw. Elec. Light Co. Inc., Maui Elec. Co. Ltd. & Kauai Island Util. Coop., No. 2015-0389 (Haw. Pub. Util. Comm'n Jun. 8, 2016) [hereinafter First PUC Proposed Framework]; Order No. 34388 Addressing Pending Matter and Issuing the Attached Proposed Community-Based Renewable Energy Program Framework and Model Tariff Language for Review and Comment, *In re* the Requests of Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co.

Commission hearing,⁷³ numerous and lengthy written comments from a variety of perspectives,⁷⁴ and utility-stakeholder meetings.

Throughout this gestation, the Commission reiterated Act 100's focus on equity. In describing the program's fundamental parameters, the Commission's first draft framework noted that "[t]he long-term objective for the [community solar] program is to create a market-based framework that enables greater renewable energy opportunities for customers who are currently unable to participate in onsite distributed generation (e.g., residents in rental housing and condominiums)."⁷⁵

Similarly, the Commission worked to incorporate legislative guidance in favor of encouraging a diversity of project sizes⁷⁶—including community-scale projects—and business models.⁷⁷ Rejecting a restrictive utility proposal,⁷⁸ the Commission designed its framework to "[a]llow the marketplace to determine the terms and ownership models" in the community solar program, leading to "more flexibility and allow[ing] for business model innovation."⁷⁹ For community solar, flexibility and innovation will be critical parts of realizing its energy justice goals.⁸⁰ This

Ltd. & Kauai Island Util. Coop., No. 2015-0389 (Haw. Pub. Util. Comm'n Feb. 10, 2017) [hereinafter Second PUC Proposed Framework].

73. Transcript of Public Hearing at 15, *In Re Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop.*, No. 2015-0389 (Haw. Pub. Util. Comm'n Sep. 21, 2016).

74. See *Docket Entries Index Report: Docket No. 2015-0389*, HAW. PUB. UTIL. COMM'N, <https://dms.puc.hawaii.gov/dms/DocketIndexReport?docketNumber=2015-0389&f=N> (last visited Apr. 27, 2019) (listing submissions by docket parties and participants, and comments submitted by members of the public).

75. First PUC Proposed Framework, *supra* note 72, at 1.

76. See *id.* at 4 ("Encourage CBRE project size diversity. Staff requests comment on the balance between economies of scale and project size diversity, consistent with the legislative intent of Act 100. This includes measures to encourage diversity in developer and project size."); Decision and Order No. 35137 at att. A 4, *In re Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop.*, No. 2015-0389 (Haw. Pub. Util. Comm'n Dec. 22, 2017) [hereinafter PUC Adopted Program Framework] (adopting facility size restrictions intended to "encourage project size diversity and customer choice").

77. See PUC Adopted Program Framework, *supra* note 76, at att. A 9 ("A vibrant CBRE market should include business model diversity and innovation, as well as accommodate a variety of ownership models.").

78. See First PUC Proposed Framework, *supra* note 72, at 3 ("The HECO Companies' proposal . . . affords little room for business model innovation. Standardized cost and a flat bill credit rate gives little flexibility to developers or customer-subscribers The design also does not provide adequate market signals to encourage features with added value, such as dispatchability.").

79. *Id.* at 5.

80. See Baker, *Unlocking the Energy Commons*, *supra* note 16, at 226 (criticizing inflexibility in community solar programs: "[T]he inflexibility of community solar leaves little room for innovations that allow communities to take control of their energy production.").

regulatory process culminated in a final program framework approved by the Commission in December 2017.⁸¹

II. COMMUNITY SOLAR AND SECURITIES LAWS

To realize the potential of community solar, the next step after policy approval is implementation. In this regard, Hawai‘i trails many other jurisdictions—particularly three jurisdictions that have emerged as community solar leaders. Since 2008, Massachusetts has enabled the concept of off-site solar in conjunction with its broader net-metering program.⁸² Colorado and Minnesota passed “community solar garden” legislation in 2010 and 2013, respectively.⁸³ Today, each of the three states has substantial community solar capacity online.⁸⁴ While many other states have community solar policies or programs in place, none appear to have yet achieved a similar program scale.⁸⁵ Given the variety in community solar laws and policies, wide geography, and the range of approaches to utility regulation and solar power in general, the pace of implementation undoubtedly involves a broad range of barriers and challenges.

A. The Securities Issue in Hawai‘i’s Community Solar Regulatory Docket

During Hawai‘i’s community solar policy gestation period, the Hawaiian Electric Companies—the State’s primary investor-owned

81. Adopted Program Framework, *supra* note 76, at 118–19.

82. MASS. GEN. LAWS ch. 164, § 140 (2018).

83. COLO. REV. STAT. § 40-2-127 (2018); MINN. STAT § 216B.1641 (2018).

84. See *Community Solar Project Database*, NAT’L RENEWABLE ENERGY LAB., <https://data.nrel.gov/submissions/95> (July 27, 2018) (identifying more than 167 megawatts of community solar capacity in Massachusetts, 158 megawatts in Minnesota, and 65 megawatts in Colorado, through Spring 2018); John Farrell, *Why Minnesota’s Community Solar Program is the Best*, INST. FOR LOCAL SELF-RELIANCE, <https://ilsr.org/minnesotas-community-solar-program/> (last updated Apr. 15, 2019) (reporting 513 megawatts of community solar garden operational capacity in February 2019); Press Release, Xcel Energy Colorado, Colorado Community Solar Projects Awarded (July 20, 2018), <https://electricenergyonline.com/article/energy/category/solar/142/713159/colorado-community-solar-projects-awarded.html> (forecasting 80 megawatts of capacity by the end of 2018); *Community Solar*, COLO. ENERGY OFFICE, <https://www.colorado.gov/pacific/energyoffice/community-solar> (last visited Apr. 27, 2019) (reporting, without a date, “nearly 70 community solar project in operation generating more than 50 MW, and many more in development”).

85. See, e.g., *Community Solar Project Database*, *supra* note 84 (identifying community solar projects in 38 states plus Washington, D.C.); see also *Community Solar*, SOLAR ENERGY INDUS. ASS’N, <https://www.seia.org/initiatives/community-solar> (last visited Apr. 27, 2019) (reporting that at least 19 states and D.C. have adopted community solar programs or policies, and that 42 states have at least one community solar project online).

utility⁸⁶—devoted large portions of its regulatory briefing to highlighting a risk that community solar projects would be treated as securities.⁸⁷ In unusually strong terms, the utility accused the Commission of “disregard for the ‘securities’ issues presented by the purchase, lease or subscription of [community solar] program interests as contemplated by the [Commission’s] Framework.”⁸⁸ The utility described this as “a potential fatal flaw, since if just one [community solar] facility is deemed to be a security and found in violation . . . this may cause the entire [community solar] market to lose confidence in the program.”⁸⁹

The utility asserted that the Commission’s framework exposed the companies (and thus utility ratepayers) to massive securities risk, potentially reaching multi-billion dollars:

[T]he Hawaiian Electric Companies could potentially face securities laws penalties from the SEC of up to \$231,868,093 (assuming a \$50,000 penalty per violation and 4,637 Participants [in the first phase of the community solar program]). The total penalty amount could increase exponentially if the higher end of the penalty range of \$500,000 is applied for each violation and/or a violation is defined as a monthly transaction between the Hawaiian Electric Companies and Participants to credit Participants for the energy output of their interest in a [community solar] project.⁹⁰

86. “Hawaiian Electric Companies” denotes three investor-owned utilities that operate the electric grid on all but one of the main Hawaiian islands: Hawaiian Electric Company, Inc. (Oah‘u), Hawai‘i Electric Light Company, Inc. (Hawai‘i), and Maui Electric Company, Ltd. (Maui). These are owned by a single parent entity, Hawaiian Electric Industries, Inc., and in some respects are operated as a single entity. Briefing in the community solar docket, for example, was submitted on behalf of all three companies. HECO Transmittal, *supra* note 71. The Kauai Island Utility Cooperative serves the island of Kauai. *Utility Resources: Utility Landscape in Hawaii*, HAW. STATE ENERGY OFFICE, <http://energy.hawaii.gov/developer-investor/utility-resources> (last visited Apr. 27, 2019).

87. For example, approximately 30% of the Hawaiian Electric Companies’ comments on the Commission’s second proposed program framework were devoted to the securities issue. Comments on Proposed CBRE Program Framework and Model Tariff at 8–9, 31–43, *In re Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop.*, No. 2015-0389 (Haw. Pub. Util. Comm’n Mar. 1, 2017) [hereinafter HECO Comments on Second PUC Proposal]. The issue was also raised repeatedly in the companies’ comments on the Commission’s first proposed framework. Comments on Draft Hawaii P.U.C. Staff Proposal for Community-Based Renewable Energy Program at i–ii, 7–9, 13, 26, 27, 30, 33, *In re Hawaiian Elec. Co., Inc., Haw. Elec. Light Co., Inc., Maui Elec. Co., Ltd. & Kauai Island Util. Coop.*, No. 2015-0389 (Haw. Pub. Util. Comm’n Jun. 30, 2016) [hereinafter HECO Comments on First PUC Proposal].

88. HECO Comments on Second PUC Proposal, *supra* note 87, at 31.

89. *Id.* at 9.

90. HECO Comments on First PUC Proposal, *supra* note 87, at 8–9.

At their core, the utility's securities arguments were focused on utility control over the design of community solar, rather than control by communities and developers. Act 100 and the Commission's proposals tipped the scale in favor of communities and developers, and in favor of project diversity in project size and participation model. The utility's proposed tariff was antithetical to this concept. It would have utilized a standard participant agreement under which material terms, including the price developers would charge consumers for participating in a community solar project, would be fixed.⁹¹ The utility asserted that:

Allowing the marketplace, i.e., Developers, to determine the terms and ownership models applicable to Participants in the [community solar] program will exacerbate the securities issues already inherently present in the program by eliminating all safeguards proposed by the Hawaiian Electric Companies to ensure that [community solar] interests are not "securities" requiring registration under federal and state securities laws.⁹²

The utility proposed to seek no-action letters from state and federal securities regulators, using the fixed program parameters as the underlying facts and circumstances to be reviewed by regulators.⁹³

B. Other Instances of the Community Solar/Securities Issue

Although the utilities' arguments about the scale of possible securities risk appears unprecedented, this securities issue was not invented by the Hawaiian Electric Companies. Several analyses suggest that there is a significant likelihood that community solar interests will be regulated as a security or suggest that community solar projects should take the precautionary measure of seeking statutory exemptions from the requirement that securities be registered before they are offered to the public. Those analyses include at least two student-written law review publications,⁹⁴ online posts by lawyers and law firms,⁹⁵ and policy briefs by

91. HECO Transmittal, *supra* note 71, at 21 ("To ensure simplicity for Participants, the upfront payment per kW AC, credit rate per kWh, and O&M Fee per kWh will be required to be the same for all projects within each tier for each technology and island.").

92. HECO Comments on First PUC Proposal, *supra* note 87, at 7.

93. *Id.* at 34.

94. Samantha Booth, Comment, *Here Comes the Sun: How Securities Regulations Cast A Shadow on the Growth of Community Solar in the United States*, 61 UCLA L. REV. 760, 760 (2014); 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, 123 (2012).

entities such as the National Renewable Energy Laboratory and others.⁹⁶ At least one analysis concludes that it is “very likely” that community solar will be classified as an investment contract under securities laws, and thus will be regulated as a security.⁹⁷

These analyses come with a limited regulatory backdrop. In 2011, a Texas solar developer named CommunitySun, LLC sought a no-action letter for its “SolarCondo” concept.⁹⁸ Although this was not, apparently, part of a broader community solar regulatory framework, the project described in CommunitySun’s request for no-action shares key hallmarks of regulated community solar programs like Hawai‘i’s:

Ownership of a SolarCondo will allow production of self-generated, individually owned solar electricity without installing solar panels at the property where the owner consumes electricity. The purpose is to provide the benefits of rooftop solar energy to people who are unable to install rooftop solar on their property. An additional public benefit is to correct the inequity to such persons, who pay for solar rebates in the overall electricity rate base, but who do not have access to solar as a power alternative.⁹⁹

The SEC issued a no-action letter in favor of CommunitySun.¹⁰⁰

95. *E.g.*, *Community Solar and Securities Regulations*, NORTON ROSE FULBRIGHT (Oct. 18, 2016), <http://www.nortonrosefulbright.com/knowledge/publications/149962/community-solar-and-securities-regulations>; *Part 5: Can Securities Exemptions Eliminate Community Solar Obstacles?*, LEWIS & CLARK L. SCH.: GREEN ENERGY INST. (Oct. 6, 2014), <https://law.lclark.edu/live/news/28143-part-5-can-securities-exemptions-eliminate>.

96. *E.g.*, DAVID FELDMAN ET AL., NAT’L RENEWABLE ENERGY LAB., SHARED SOLAR: CURRENT LANDSCAPE, MARKET POTENTIAL, AND THE IMPACT OF FEDERAL SECURITIES REGULATION 18 (2015) [hereinafter NREL, SHARED SOLAR], <https://www.nrel.gov/docs/fy15osti/63892.pdf>; *see also* Memorandum from Stoel Rives L.L.P. to Nat’l Renewable Energy Lab. (June 25, 2009) [hereinafter Stoel Rives Memorandum] (on file with author); DIANA CHACE & NATE HAUSMAN, CONSUMER PROTECTION FOR COMMUNITY SOLAR: A GUIDE FOR STATES 35 (2017), <https://www.cesa.org/assets/2017-Files/Consumer-Protection-for-Community-Solar.pdf>.

97. *See* Booth, *supra* note 94, at 811 (asserting that “[b]ecause of 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”).

98. Letter from Paul S. Maco, Vinson & Elkins, to Office of the Chief Counsel, Securities and Exchange Commission 1 (Aug. 29, 2011) [hereinafter Maco Letter] <https://www.sec.gov/divisions/corpfin/cf-noaction/2011/communitysun082911-2a1-incoming.pdf>. The request for no-action described the CommunitySun project as selling “real estate interests in a solar facility.” *Id.*

99. *Id.*

100. CommunitySun, LLC, SEC No-Action Letter, 2011 WL 3837626 (Aug. 29, 2011) (“Based on the facts presented, the Division will not recommend enforcement action to the Commission if, in reliance upon your opinion of counsel that SolarCondos are not securities, CommunitySun offers and

Conversely, a 2014 order from Vermont’s securities regulator deemed a series of proposed community solar projects to be securities, before granting a public interest exemption from registration, in part based upon the State’s renewable energy policy.¹⁰¹ In 2010, the Deputy Commissioner of the Colorado Securities Division reviewed a hypothetical subscription in a community solar project, and determined that it could not be deemed to absolutely fall outside the definition of a security.¹⁰² In Hawai‘i, the State’s Securities Commissioner, in response to a request from the Hawai‘i State Energy Office, submitted a letter to the Public Utilities Commission “[c]autio[n]g that [s]ecurities-[r]elated [i]ssues [m]ay [a]rise.”¹⁰³ At the time, the program design was incomplete and thus this preliminary determination was made without the benefit of specific facts or circumstances.¹⁰⁴

C. Dueling Problems of Inflexibility and Uncertainty

The Hawai‘i Commission’s second proposed framework did not adopt the Hawaiian Electric Companies’ proposal to tightly constrain program parameters and then to seek no-action letters based on those fixed parameters.¹⁰⁵ In response,¹⁰⁶ the Hawaiian Electric Companies pointed to California’s approach, where regulators adopted a San Diego Gas & Electric recommendation to require community solar projects to obtain “a securities opinion from an AmLaw 100 law firm stating that the arrangement complies with securities law, and that the [investor-owned utility] and its ratepayers are not at risk for securities claims associated with

sells the SolarCondos without registration under the Securities Act of 1933 and the Securities Exchange Act of 1934.”).

101. Order, *In re* Registration Exemption for SolarCommunities, Inc., No. 14-022-S, 2014 WL 2514647, at *2 (Vt. Sec. Div. Apr. 21, 2014). The exemption was later rendered null and void by Vermont’s more general “SUN” registration exemption for some community solar models. *See id.* (stating that “if and when the Commissioner issues a general comprehensive order regarding community solar projects, this Order shall be rendered null and void”); Order, *In re* Vt. Solar / Util. No-Action Exemption, No. 14-023-S, 2014 WL 3697670, at *1 (Vt. Sec. Div. July 21, 2014) [hereinafter Vermont SUN Exemption I] (providing a self-executing registration exemption for eligible community solar projects).

102. Gerald Rome, Deputy Securities Comm’r, Colo. Div. of Securities, Opinion Letter on the Issuance, Offer or Sale of a Community Solar Garden (Sept. 22, 2010), *as reprinted in* Blue Sky L. Rep. (CCH) ¶ 13666V.

103. Letter from Ty Nohara, Haw. Comm’r of Sec. to the Haw. Public Utils. Comm’n 3 (Feb. 5, 2016) [hereinafter Nohara Letter].

104. *See id.* at 2–3 (recognizing that the program design had not yet been completed, and asserting that “[t]o issue an opinion at this time, without any information as to how the project will be structured, would be based purely and inappropriately on speculation”).

105. Second PUC Proposed Framework, *supra* note 72.

106. HECO Comments on Second PUC Proposal, *supra* note 87, at 34–35.

the project.”¹⁰⁷ Apparently, all of the shortlisted bids in the first request for offer by California’s investor-owned utilities failed to obtain this opinion letter; no bids were awarded.¹⁰⁸ This requirement was later affirmed by the California Commission, but it was relaxed to allow opinion letters from other attorneys meeting prescribed criteria for experience and insurance coverage.¹⁰⁹

Expanding upon California’s approach, the Hawai’i utilities argued for requiring the operators of community solar projects to obtain no-action letters from federal and state securities regulators, qualify for an exemption from registration, or secure a lawyer’s opinion letter.¹¹⁰ Hawai’i’s Commission did not adopt the utilities’ proposal, but like the California

107. Decision No. 15-01-051, Approving Green Tariff Shared Renewables Program for San Diego Gas & Electric Co., and So. Cal. Edison Co. Pursuant to Senate Bill 43, at 71, *In re San Diego Gas & Electric Company (U902E) for Authority to Implement Optional Pilot Program to Increase Customer Access to Solar Generated Electricity*, No. 12-01-008 (Cal. Pub. Util. Comm’n Feb. 2, 2015). Later, this requirement was relaxed to allow for an opinion by smaller law firms. Decision 17-07-007, *Modifying the AmLaw 100 Securities Opinion Requirement for Enhanced Community Renewables Projects Under the Green Tariff Shared Renewables Program* in D.15-01-051, *In re San Diego Gas & Electric Company (U902E) for Authority to Implement Optional Pilot Program to Increase Customer Access to Solar Generated Electricity*, No. 12-01-008 (Cal. Pub. Util. Comm’n July 13, 2017).

108. Brian Orion, STOEL RIVES, *California Community Solar Forum Points to Need for Reforms* (Apr. 12, 2017), <https://www.lawofrenewableenergy.com/2017/04/articles/solar/report-on-community-solar-developer-forum-in-california/>. California’s community solar offerings have subsequently grown, but not as fast as one might expect from the country’s largest potential market. As of June 2017, the California PUC reported approximately 22 megawatts enrolled in the program. CAL. PUB. UTIL. COMM’N, *COMMUNITY SOLAR PROGRAM FOR DISADVANTAGED COMMUNITIES WEBINAR 8* (2018), http://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/About_Us/Organization/Commissioners/Martha_Guzman_Aceves/California%20PUC%20Community%20solar%20Program%20webinar.pdf. In October 2018, Southern California Edison filed an application to replace the community renewables program, and other programs, with a modified “Green Energy Program.” See Application at 2, *In re Application of So. Cal. Edison Co. (U 338-E) for Approval of Green Energy Programs*, No. A.18-09-015 (Cal. Pub. Util. Comm’n Sep. 26, 2018) (“Numerous barriers for customers and developers, including program caps and sizing restrictions, make it difficult for SCE to subscribe customers to either GTSR program.”). In December 2017, the utility requested to sunset the existing community solar program at the end of 2018, “due to the low number of participating customers.” *Id.*

109. See Decision 17-07-007, *supra* note 107, at A1 (modifying the earlier AmLaw 100 requirement such that lawyers with five full-time years of securities experience within the last eight years, licensed in California, and carrying a minimum of \$10 million in professional liability coverage could provide an opinion letter).

110. See HECO Comments on Second PUC Proposal, *supra* note 87, at 33. The utilities asked the commission to:

[R]equire concrete evidence from [community solar] program Subscriber Organizations that their [community solar] program interests are not “securities,” either by securing “no-action” letters from the SEC, qualifying for a specific exemption confirmed by the SEC or an opinion letter from appropriate expert counsel, and or . . . obtain clearance from the State of Hawai’i, under its broader blue sky laws, that such program interests are either not “securities” or not subject to enforcement by the Hawai’i Securities Commissioner.

Id.

Commission it acknowledged substantial uncertainty about this issue nationally.¹¹¹

The utilities' first proposal, setting inflexible program parameters, would have created an energy justice barrier by limiting the ability of communities and developers to create projects and models that directly respond to community needs.¹¹² This second utility proposal would have begrudgingly permitted more flexibility, but created a new barrier for all community solar projects in the form of the time, complexity, and cost involved in satisfying the proposed securities requirements.¹¹³ The relative shadow of that barrier is even larger for community-scale, community-driven community solar projects.

At the same time, uncertainty about whether community solar interests are securities creates its own barriers for communities and utilities alike. A National Renewable Energy Laboratory (NREL) report, cited by the California Commission in its decision requiring a securities opinion, described uncertainty about whether community solar will be regulated as a security as a "top concern" among community solar stakeholders.¹¹⁴ A 2009 legal memorandum to NREL from the Stoel Rives law firm illustrates the root of that uncertainty.¹¹⁵ Although the memorandum provides recommendations on how to minimize the risk that community solar

111. See PUC Adopted Program Framework, *supra* note 76, at 109 ("The commission notes that this [securities issue] is an area of some uncertainty nationally . . ."); Decision 17-07-007, *supra* note 107, at 7 ("Hence, considering the uncertainties around the applicability of securities law, we will not completely eliminate the securities option requirement at this time."). The Hawai'i Commission noted its limited authority on this securities issue, gave the utilities latitude to limit their role in an online platform that would identify all community solar projects available—to address the utilities' concerns that the utilities would become "broker[s]" of unregistered securities—and asserted that its program design includes a "robust set of consumer protection mechanisms with an eye toward mitigating potential securities risks." PUC Adopted Program Framework, *supra* note 76, at 109–12.

112. See *supra* Part I.C (describing the potential energy justice benefits of community solar).

113. See, e.g., Decision 17-07-007, *supra* note 107, at 2 (noting that the Commission "acknowledged the parties' concern regarding the cost of this requirement"); NREL, SHARED SOLAR, *supra* note 96, at 14 ("The legal determination itself [regarding whether a community solar interest is a security] may consume significant resources."); cf. James S. Mofsky, *Some Comments on the Expanding Definition of Security*, 27 U. MIAMI L. REV. 395, 395 (1973) ("A threshold question to securities lawyers and their clients is whether a particular scheme of financing will be deemed a security. If so, it is subject to the costly registration provisions of the law if offered for sale but not exempt from registration.").

114. NREL, SHARED SOLAR, *supra* note 96, at vi ("One of the top concerns raised by shared solar stakeholders is uncertainty about the applicability of Securities and Exchange Commission (SEC) requirements for registration and disclosure of shared solar projects.").

115. Stoel Rives Memorandum, *supra* note 96, at 2, 6–10 ("This memorandum is intended to set forth some of the key factors that the courts tend to use and our general recommendations on structuring those factors in an effort to minimize the likelihood that a security exists. Ultimately, each situation will have to be judged on its specific facts using the factors and principles described above.").

projects involve a security,¹¹⁶ it also explains that there is “no bright line test to determine whether a [community solar] contract is a security,” and asserts that each circumstance should be considered individually.¹¹⁷

Over the past century, securities laws have been the subject of a variety of criticisms.¹¹⁸ Community solar illuminates a new one: uncertainty about whether it will be regulated as a security systemically tilts in favor of dated utility models and away from new models of community energy innovation. To illustrate, consider that the Hawaiian Electric Companies are owned by a publicly traded holding company.¹¹⁹ Like many other electric utilities, they are intimately familiar with securities regulation, and have institutional mechanisms to ensure compliance.¹²⁰ Community groups and community solar developers typically do not.¹²¹ *Securities insecurity*¹²² therefore poses substantially less burden to utility-led community solar projects and models compared to community-led projects.¹²³ Energy justice principles demand that we more closely evaluate the source of this regulatory uncertainty.

116. *Id.* at 6–9.

117. *Id.* at 2, 10.

118. *See, e.g.*, Homer Kripke, *Fifty Years of Securities Regulation in Search of a Purpose*, 21 SAN DIEGO L. REV. 257, 272–73 (1984) (describing a number of criticisms of federal securities regulation); Rutherford B. Campbell, Jr., *The Role of Blue Sky Laws After NSMIA and the JOBS Act*, 66 DUKE L.J. 605, 606 (2016) [hereinafter Campbell, *Blue Sky Laws*] (arguing that state securities laws have been an impediment to efficient movement of capital, “felt most acutely in regard to small-business”).

119. *See Hawaiian Electric Industries Inc.*, MARKET WATCH, <https://www.marketwatch.com/investing/stock/he> (last visited Apr. 27, 2019) (providing the latest price of HEI stock).

120. *Cf.* George J. Benston, *An Appraisal of the Costs and Benefits of Government-Required Disclosure SEC and FTC Requirements*, 41 LAW & CONTEMP. PROBS. 30, 34 (1977) (“In general, though, once a corporation has adapted its records to the SEC’s requirements, the additional direct cost of filling in the periodic report forms may not be very great However, the relative burden on smaller corporations is most likely much greater and may be quite onerous.”).

121. *See generally* Robert G. O’Connor et al., *Securities Law 101 for Community Solar Market Participants – Orange Groves, Country Clubs, and Solar Condos*, ENERGY TODAY, <https://www.energytoday.net/economics-policy/policies/securities-law-101-community-solar-market-participants-orange-groves-country-clubs-solar-condos/> (last visited Apr. 27, 2019) (asserting that “[s]ome community solar market participants may decide to pursue a strategy to mitigate the risk of securities liability by seeking an SEC no-action letter with respect to their particular set of facts or by obtaining an opinion of legal counsel, but often these strategies are impractical because of the delays and costs involved”).

122. Bailey, *supra* note 94.

123. O’Connor et al., *supra* note 121 (recommending that “[p]arties that intend to develop or participate in a community solar offering should consult with legal counsel having expertise in these matters to discuss the facts and circumstances of the particular community solar offering and to develop a strategy to navigate the potential applicability of state and federal securities regulatory regimes to the offering”).

III. WHAT IS A SECURITY?

For several reasons, Hawai'i offers a suitable policy test bed in which to take a closer look at community solar and securities. First, the State's recently approved community solar program offers a specific framework of facts and circumstances under which the applicability of securities laws can be examined.¹²⁴

Second, unlike the CommunitySun no-action letter, the Vermont exemption, the Colorado opinion letter, and several other analyses,¹²⁵ community solar in Hawai'i may need to heed two tests for defining an investment contract for the purpose of securities laws: (1) federal law applying the *Howey*¹²⁶ test, also utilized by a majority of states; and (2) the State's blue sky laws,¹²⁷ applying the minority risk capital test.¹²⁸ Six of at least eighteen states with community solar legislation or regulation have adopted the risk capital test.¹²⁹ But the test has not been the focus of discussion on community solar and securities to date. Furthermore, the risk capital test is sometimes characterized as broader than the federal test, and therefore more likely to implicate community solar as a security.¹³⁰

124. See Nohara Letter, *supra* note 103 (noting the need for a fact-specific inquiry).

125. See *supra* notes 101–03 and accompanying text.

126. SEC v. W. J. Howey Co., 328 U.S. 293, 301 (1946).

127. The phrase *blue sky laws* describes state securities laws. See, e.g., State v. Gopher Tire & Rubber Co., 177 N.W. 937, 938 (Minn. 1920) (“It has been said that its popular name [blue sky law] indicates the evil at which it is aimed, that is, speculative schemes having no more basis than so many feet of blue sky.” (first citing Hall v. Geiger-Jones Co., 242 U.S. 549 (1917); then citing State v. Agey, 88 S.E. 726 (N.C. 1916))).

128. See, e.g., Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc., 485 P.2d 105, 110–11 (Haw. 1971) (applying the risk capital test).

129. See, e.g., Tennessee v. Brewer, 932 S.W.2d 1, 13 & n.13 (Tenn. Crim. App. 1996) (identifying various states adopting the risk capital test by decision, rule, or statute); JEFFREY J. COOK & MONISHA SHAH, NAT’L RENEWABLE ENERGY LAB., FOCUSING THE SUN: STATE CONSIDERATIONS FOR DESIGNING COMMUNITY SOLAR POLICY app. A (2018), <https://www.nrel.gov/docs/fy18osti/70663.pdf> (summarizing community solar legislation or regulation in eighteen states).

130. See Nohara Letter, *supra* note 103 (asserting that “analysis of an investment contract in a jurisdiction following *Hawaii Market Center* will be broader . . . than in jurisdictions that follow *Howey*”); HECO Comments on Second PUC Proposal, *supra* note 87, at 33 (arguing that “it’s entirely possible that [community solar] programs developed in other jurisdictions may indeed be ‘securities’ under the broader Hawaii test”); see also Michael E. Stevenson & John J. O’Leary III, *Definition of a Security: Risk Capital and Investment Contracts in Washington*, 3 U. PUGET SOUND L. REV. 83, 83–84 (1979) (describing Washington’s adoption of the risk capital test as “expand[ing] the applicability of the securities act to reach financing schemes that heretofore were unregulated”). Not all analyses agree that the risk capital test is broader than the *Howey* test. See, e.g., Stanley v. Commercial Courier Serv., Inc., 411 F. Supp. 818, 823 (D. Or. 1975) (acknowledging that the tests are not “synonymous” but concluding that they are “essentially the same”); Brewer, 932 S.W.2d at 13 (rejecting appellant’s contention that “the test in [*Hawai’i*] Market is far broader than the *Howey-Forman* formula”).

Third, Hawai'i was a leading adopter of the risk capital test, creating the frequently cited *Hawaii Market Center* formulation in 1971.¹³¹

A. Economic Reality and Investment Contracts as Securities

The threshold question of what is regulated as a security has a long history, in an astonishingly wide variety of transactional contexts.¹³² The contours of that history have been extensively covered and discussed elsewhere.¹³³ The following summary is not intended to re-convey the

131. *Hawaii Market Center*, 485 P.2d at 105, 109.

132. The following list illustrates a sampling of the analyses and contexts in which the definition of a security has been considered: Rutherford B. Campbell Jr., *Stallion Syndicates as Securities*, 70 KY. L.J. 1131, 1158 (1981); William J. Carney, *Defining A Security: The Addition of A Market-Oriented Contextual Approach to Investment Contract Analysis*, 33 EMORY L.J. 311, 358–59 (1984) (discussing, for example, insurance policies); James D. Gordon III, *Flying into Blue Sky: Aircraft Leasebacks As Securities*, 35 UCLA L. REV. 779 (1988); James D. Gordon III, Essay, *Interplanetary Intelligence About Promissory Notes As Securities*, 69 TEX. L. REV. 383, 384 (1990) (including this amusing exchange between hypothetical interplanetary aliens: “Monset: Do you mean that even though the Acts say ‘any note’ is a security, they don’t mean that? Zoron: That’s correct. For example, the promissory notes that accompany home mortgages are not securities. Monset: This news is going to make a lot of homeowners on [planet] Zerix happy.”); Thomas Lee Hazen, *Taking Stock of Stock and the Sale of Closely Held Corporations: When Is Stock Not A Security*, 61 N.C. L. REV. 393, 386–98 (1983); Wayne Klein, *Certificates of Deposit As Securities: State Law Considerations*, 5 ANN. REV. BANKING L. 55, 60, 78–79, 85–86 (1986); Joseph C. Long, *The Naked Commodity Option Contract as a Security*, 15 WM. & MARY L. REV. 211, 213–17 (1973); Peter A. MacLaren, *Securities Law – Profits in Paradise: When Resort Condominiums Qualify as Investment Contracts*, 19 GOLDEN GATE U. L. REV. 177, 180–86, 190–94 (1989); Joan MacLeod Heminway, *To Be or Not to Be (A Security): Funding for-Profit Social Enterprises*, 25 REGENT U. L. REV. 299, 311–13, 315, 317 (2013); Ellen R. Peirce & Richard A. Mann, *Time-Share Interests in Real Estate: A Critical Evaluation of the Regulatory Environment*, 59 NOTRE DAME L. REV. 9, 26, 30–34 (1983); R. K. Pezold & Danny P. Richey, *The ‘Industry Deal’ Among Oil and Gas Companies and the Federal Securities Acts*, 16 TEX. TECH L. REV. 827, 840–45 (1985) (discussing undivided fractional interests in oil and gas leases); Mark A. Sargent, *Are Limited Liability Company Interests Securities*, 19 PEPP. L. REV. 1069, 1102 (1992); Jeffrey Allen Tew & David Freedman, *In Support of SEC v. W. J. Howey Co.: A Critical Analysis of the Parameters of the Economic Relationship Between an Issuer of Securities and the Securities Purchaser*, 27 U. MIAMI L. REV. 407, 422 (1973) (discussing contexts such as partnerships, joint ventures, and cemetery plots); Richard A. Barasch, Comment, *Interest in Pension Plans As Securities: Daniel v. International Brotherhood of Teamsters*, 78 COLUM. L. REV. 184, 185 (1978); Note, *The Federal Securities Laws and Employee Pension Participants: Retiring Daniel*, 87 YALE L.J. 1666, 1667 (1978); Shanah D. Glick, Comment, *Are Viatical Settlements Securities Within the Regulatory Control of the Securities Act of 1933?*, 60 U. CHI. L. REV. 957, 958 (1993); *Securities Acts—Federal Securities Exchange Act—Withdrawable Capital Accounts in Savings and Loan Association Are Not “Securities” Within Antifraud Provisions of Section 10(b)*—*Tcherepnin v. Knight*, 371 F.2d 374 (7th Cir), cert. granted, 387 U.S. 941 (1967), 81 HARV. L. REV. 495, 498 (1967).

133. The seminal treatise by Professor Louis Loss (now with Professor Joel Seligman and Professor Troy Paredes) is one particularly helpful resource. See generally LOUIS LOSS ET AL., *FUNDAMENTALS OF SECURITIES REGULATION* 1–111, 387–487 (7th ed. 2018) (overviewing a history of securities regulation). Other sources for insightful summaries, histories, or analyses from various perspectives include: Douglas M. Branson & Karl Shumpei Okamoto, *The Supreme Court’s Literalism*

entirety of that background. Rather, it is intended to provide some additional historical context for the early history of this issue and to orient readers who may be arriving at this issue from the perspective of utility regulation or energy justice, rather than from a securities background.

State and federal securities laws define a “security” in famously broad terms:

[A]ny 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.¹³⁴

During decades of uncertainty over what is, and is not, a security, this laundry list and undefined catchall provisions like “investment contract” and in general, “any interest or instrument commonly known as a security” have been the subject of much debate and hand-wringing.¹³⁵

and the Definition of Security in the State Courts, 50 WASH. & LEE L. REV. 1043, 1092 (1993); Williamson B. C. Chang, *Meaning, Reference, and Reification in the Definition of a Security*, 19 U.C. DAVIS L. REV. 403, 457–60 (1986); J. Thomas Hannan & William E. Thomas, *The Importance of Economic Reality and Risk in Defining Federal Securities*, 25 HASTINGS L.J. 219 (1974); Homer Kripke, *supra* note 118; Jonathan R. Macey & Geoffrey P. Miller, *Origin of the Blue Sky Laws*, 70 TEX. L. REV. 347 *passim* (1991); Paul G. Mahoney, *The Origins of the Blue-Sky Laws: A Test of Competing Hypotheses*, 46 J.L. & ECON. 229, 231–33 (2003); Mofsky, *supra* note 113; Gary S. Rosin, *Historical Perspectives on the Definition of A Security*, 28 S. TEX. L. REV. 575 (1987) (commenting on the legislative history of the Act); Marc I. Steinberg & William E. Kaulbach, *The Supreme Court and the Definition of Security: The Context Clause, Investment Contract Analysis, and Their Ramifications*, 40 VAND. L. REV. 489 (1987) (exploring the meaning of a security in Supreme Court jurisprudence); Stevenson & O’Leary, *supra* note 130.

134. 15 U.S.C. § 77b(a)(1) (Supp. 2018); *see also, e.g.*, 15 U.S.C. § 78c(a)(10) (Supp. 2018) (defining a security in similar terms as section 77b(a)(1)); HAW. REV. STAT. § 485A-102 (Supp. 2017) (defining “security” in terms very similar to the federal statutes).

135. *See, e.g.*, Mofsky, *supra* note 113, at 396–97 (“The problem is not with such standard instruments as stocks, bonds, debentures, or notes, for they are readily identifiable as securities. Rather,

Of course, a community solar project could, theoretically, be developed in a way that clearly renders it a security. For example, interests in the project could be offered in the form of stock in the project's corporate owner. That corporate owner could generate revenue via a power purchase agreement with a utility. The corporate owner's profits and capital could be returned to stockholders in the form of dividends and appreciation. As "stock," this would be likely to fall within the securities definition¹³⁶ and would need to be registered¹³⁷ or qualify for an exemption from registration.¹³⁸

More realistically, this is not how community solar programs are intended to operate, particularly where they are implemented as a tariff overseen by a public utilities regulator. Thus, the question of whether community solar is a security is couched in terms of whether participation in a project falls within the catchall concept of an *investment contract*.

1. A Closer Look at *Gopher Tire & Rubber Co.* and the Birth of Investment Contracts as Securities

The concept of investment contracts as securities predates the Federal Securities Acts of 1933 and 1934; the concept was incorporated into Minnesota securities legislation in 1917.¹³⁹ In 1920, the Minnesota Supreme Court first analyzed the phrase in *State v. Gopher Tire & Rubber Co.*¹⁴⁰ For \$50, the defendant tire manufacturer sold certificates appointing "the holder

the difficulty arises with the more ingenious devices that do not clearly come within the purview of the orthodox terminology. To be more specific, the problem stems from the way courts and regulators define the terms 'investment contract,' . . . and 'any interest or instrument commonly known as a security.'"). Note that the phrase "investment contract" has developed into the operative catchall for this definition. See *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852 (1975) (stating that "[w]e perceive no distinction, for present purposes, between an 'investment contract' and an 'instrument commonly known as a security'").

136. 15 U.S.C. § 77b(a)(1) (Supp. 2018) (including "stock" in the definition of a security); see also, e.g., HAW. REV. STAT. § 485A-102 (Supp. 2017) (including "stock" in the definition of a security).

137. See, e.g., 15 U.S.C. § 77e(c) (2012) (making it unlawful to sell, in interstate commerce, "any security, unless a registration statement has been filed as to such security"); HAW. REV. STAT. § 485A-301 (2017) ("It is unlawful for a person to offer or sell a security in this State unless: (1) The security is a federal covered security; (2) The security, transaction, or offer is exempted from registration under sections 485A-201 to 485A-203; or (3) The security is registered under this chapter.").

138. 15 U.S.C. § 77d (2012 & Supp. 2018) (identifying exempt transactions, such as those covered by Regulation D, 17 C.F.R. § 230.500-.508 (2018)); HAW. REV. STAT. §§ 485A-201 to -203 (2018) (identifying exempt transactions and securities).

139. See, e.g., Mofsky, *supra* note 113, at 397 (explaining that "[t]he process all began in 1917 when the Minnesota Legislature incorporated the term 'investment contract' in its statute defining 'security'").

140. *State v. Gopher Tire & Rubber Co.*, 177 N.W. 937, 938 (Minn. 1920).

as one of its agents to assist by word of mouth and in other ways in the sale of tires and tubes.”¹⁴¹ In return, the certificate holders were promised a pro rata share in the defendant’s proceeds, an annual bonus based on excess earnings, and a discount on tires and tubes for their own consumption.¹⁴²

The court utilized a flexible view of a security:

To lay down a hard and fast rule by which to determine whether that which is offered to a prospective investor is such a security as may not be sold without a license would be to aid the unscrupulous in circumventing the law. It is better to determine in each instance whether a security is in fact of such a character as fairly to fall within the scope of the statute.¹⁴³

Applying this instance-by-instance rubric, the court observed that “[t]he certificates are like stock in that they give their holders the right to share in the profits of the corporation, but their value is purely speculative, for their holders get no interest in the tangible assets of the corporation.”¹⁴⁴ But rather than finding that the certificates were securities as “stock,” the court invoked the statutory phrase “investment contract,” and on this basis determined that the certificates were securities.¹⁴⁵

The court defined an investment contract as a contract or scheme for “[t]he placing of capital or laying out of money in a way intended to secure income or profit from its employment.”¹⁴⁶ In the relatively early evolution of the securities laws, this formulation was recounted and used by a variety of courts.¹⁴⁷ In the subsequent century, at least one author has suggested

141. *Id.* at 937.

142. *Id.* at 937–38.

143. *Id.* at 938.

144. *Id.*

145. *Id.* The court summarized the applicable statute as follows:

All persons, firms, and corporations are prohibited from engaging, within this state, in the business of selling or negotiating for the sale of any *stocks, bonds, investment contracts, or other securities* issued by him or it, except securities specifically enumerated in section 2 of the act. No investment company or dealer shall sell or offer for sale, or profess the business of selling or offering for sale, securities coming within the scope of the act, unless and until he or it shall have furnished to the state securities commission information touching the honesty, good faith, and character of the business of the company or dealer, and shall have obtained from the commission a license to sell securities. Violation of any of the provisions of the act is made a gross misdemeanor.

Id. (emphasis added).

146. *Id.*

147. *E.g.*, SEC v. Bailey, 41 F. Supp. 647, 651 (S.D. Fla. 1941) (applying the federal securities laws); *People v. White*, 12 P.2d 1078, 1081 (Cal. Ct. App. 1932); *Freeze v. Smith*, 236 N.W. 810, 812 (Mich. 1931); *Stevens v. Liberty Packing Corp.*, 161 A. 193, 195 (N.J. Ch. 1932); *State v. Heath*, 153

that it may have given birth to the risk capital test for defining a security, discussed further in Part III.B.¹⁴⁸

The Minnesota Supreme Court's approach was animated by the stated purpose of the then-burgeoning blue sky laws, targeting "get-rich-quick" schemes:

The purpose of the statute is to protect the public against imposition. It is a new form of regulatory law which, in the course of a few years, has swept over 33 states. It has been said that its popular name indicates the evil at which it is aimed, that is, speculative schemes having no more basis than so many feet of blue sky, and that it is intended to put a stop to the sale of shares in visionary oil wells, nonexistent gold mines and other "get-rich-quick" schemes calculated to despoil credulous individuals of their savings.¹⁴⁹

The court's reference to "visionary oil wells" reveals an interesting connection between energy development and securities laws.¹⁵⁰ In the modern definition of a security, "fractional undivided interest in oil, gas, or other mineral rights" are expressly included in the definition's laundry list.¹⁵¹ The 1917 Minnesota statute utilized more general terms like stocks, bonds, and investment contracts.¹⁵² But when the court considered this general language, it appears that oil investments were top-of-mind on the list of speculative schemes to be regulated as securities.¹⁵³

Oil exploration ignited in the U.S. with the first oil-specific commercial wells in the mid-1800s.¹⁵⁴ In 1887, the Minnesota legislature

S.E. 855, 857 (N.C. 1930); *In re Bowen*, 49 N.E.2d 753, 755 (Ohio 1943); *Union Land Assocs. v. Ussher*, 149 P.2d 568, 570 (Or. 1944); *Brownie Oil Co. of Wis. v. R.R. Comm'n of Wis.*, 240 N.W. 827, 829 (Wis. 1932).

148. See Joseph C. Long, *An Attempt to Return Investment Contracts to the Mainstream of Securities Regulation*, 24 OKLA. L. REV. 135, 169 (1971) (arguing that "[i]n the *Gopher* case there is language indicating that the court had some idea of the risk capital approach").

149. *Gopher Tire*, 177 N.W. at 938 (citations omitted).

150. *Id.*

151. 15 U.S.C. § 77b(a)(1) (Supp. 2018).

152. *Gopher Tire*, 177 N.W. at 938.

153. See *id.* ("[The statute] is intended to put a stop to the sale of shares in visionary oil wells . . .").

154. See, e.g., Alexandra B. Klass & Danielle Meinhardt, *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 IOWA L. REV. 947, 953–54 (2015) (discussing the history and origins of the U.S. oil industry).

Although many textbooks cite Edw[in] Drake's 1859 oil strike in Titusville, Pennsylvania, as the first major development in the modern petroleum industry, that discovery was not the first, nor was it the first time people recognized oil's utility and potential economic value. In 1543, Spanish explorers

directed the state geologist, N.H. Winchell, to explore for oil, coal, gas, and other resources.¹⁵⁵ Winchell described this legislative act as the result of a “feverish” response to gas discoveries in Pennsylvania and other states and a resulting “impulse toward economic geology in Minnesota.”¹⁵⁶

By 1889, it was apparently evident to Winchell that much of the animation around oil and gas exploration in Minnesota was unwarranted.¹⁵⁷

found oil floating on the water’s surface on the Texas coast near the present-day city of Port Arthur, and reported using it to caulk their boats. Records from the 18th and 19th centuries indicate that indigenous peoples and European missionaries identified and used oil springs in what is now western New York. By the late 1700s, oil was a recorded object of commerce, sold by the gallon, keg, and bottle. The expansion of the petroleum industry occurred only once a steady supply of oil could reach refiners and consumers. The first reliable petroleum supply was developed in the “Oil Region” of northwestern Pennsylvania, beginning with Drake’s well at Titusville in 1859. By the end of 1860 there were 74 oil wells along nearby Oil Creek, a tributary to the Allegheny River, and it was estimated that a total of 200,000 barrels of oil had been produced up to that point.

Id.

155. See MINN. STAT. § 226 (1887); see also G.B. Morey, *The Search for Oil and Gas in Minnesota*, MINN. GEOLOGICAL SURVEY EDUCATIONAL SERIES-6, 1984, at 1, 20, https://conservancy.umn.edu/bitstream/handle/11299/57260/MGS_ES_6.pdf (describing Winchell’s responsibilities). To illustrate the activity surrounding oil and gas at this time, consider that 1887 was also the year that Standard Oil Company filed articles of incorporation in Minnesota. STATE OF MINN., ANN. REP. OF THE SEC’Y OF STATE TO THE LEGIS. OF MINN. FOR THE FISCAL YEAR ENDING JULY 31, 1887, at 16 [hereinafter MINN. LEGIS. REP., 1887]. Standard Oil was the predecessor to modern oil giants such as Exxon and Chevron. It grew into a behemoth that U.S. President and, later, Supreme Court Justice William Howard Taft described as “the greatest monopoly . . . in the world” and “one of the chief reasons” for U.S. anti-trust legislation. Barak Orbach & Grace Campbell Rebling, *The Antitrust Curse of Bigness*, 85 S. CAL. L. REV. 605, 609 (2012) (quoting WILLIAM HOWARD TAFT, THE ANTI-TRUST ACT AND THE SUPREME COURT 85 (1914)). The company created the infamous riches of John Rockefeller. See generally *id.* at 609–11 (describing Rockefeller and the rise of Standard Oil). To illustrate how much the world has changed, consider that the Rockefeller family fortune garnered global attention in 2014 by announcing its plan to divest from fossil fuel investments. See *Fossil Fuel Divestment*, ROCKEFELLER BROTHERS FUND, <https://www.rbf.org/about/divestment> (last visited Apr. 27, 2019).

156. N. H. WINCHELL, GEOLOGICAL & NAT. HISTORY SURVEY OF MINN., NATURAL GAS IN MINNESOTA 3–4 (1889).

The great discoveries of gas in Pennsylvania and more recently in Ohio and Indiana, and in other places in the United States, have had their natural effect in Minnesota. They have caused a feverish and sometimes an expressed feeling of unrest, and of curiosity to know what would be the result in case a careful probing of the earth’s crust were undertaken. . . . This general impulse toward economic geology in Minnesota resulted in the passage of the following law by the Legislature of 1887.

Id.

157. See Morey, *supra* note 155, at 22 (“Already in 1889 it was evident to Winchell that most of the rock formations that furnish gas in the United States are lacking in Minnesota. *Bulletin 5* relates how Winchell’s geologic conclusions were for the most part ignored by wildcatters.”). After Winchell’s investigation, the State turned over operation of exploratory machinery to the private Minnesota Gas, Oil and Fuel Company to explore one potentially promising gas resource. WINCHELL, *supra* note 156, at

Despite that, speculative “wildcat” oil exploration continued for at least a century.¹⁵⁸ By the 1920s, reports of finding oil had sparked interest in various parts of the State, including “periodic reports of striking it rich using divining rods.”¹⁵⁹ Reports like this were part of public consciousness. After a retired Methodist minister mysteriously found “pure oil and gasoline” in his water well,¹⁶⁰ headlines reported that “Lake Lillian Holds its Breath” as “Town Awaits Result of the Drilling for Oil.”¹⁶¹

Newspapers’ advertisements from this era of Minnesota’s history further illustrate this “feverish” vision of oil and gas riches. For example:

The Revenue Mining Company touted “The Newest Oil Field” and asked urged readers to “[b]uy in a company which already has oil and gas and other rich products ready for the market. Other companies are selling stock at much more than we are asking and have no development, only the bare ground . . . Get in now and make this profit within the next few days.”¹⁶²

The Paramount Oil & Gas Company issued a “Special Announcement To Investors” about a money-back guaranteed investment. “If You Are Looking for an investment where, at least, 12 per cent annually and the safety of your principal is assured, we can serve you. We can, also, show you speculative possibilities of several hundred per cent that are as sure as anything can be sure in the oil business.”¹⁶³

“OIL!” blared Morrison & Company. “One Can Invest Safely in Oil as Well as Speculate, LET US TELL YOU ABOUT [AN OIL STOCK] . . . EARNING ITS DIVIDENDS NINE TIMES OVER REQUIREMENTS. We know of no other preferred stock having behind it such large equities, great earning power, and showing such a satisfactory income yield on the investment.”¹⁶⁴

13–15. “No natural gas or oil were encountered in commercial quantities.” Morey, *supra* note 155, at 20.

158. Morey, *supra* note 155, at 27. “‘Wildcat’ is the term used for exploration ventures in territory not known to be productive.” *Id.* at 20.

159. *Id.* at 22.

160. *Id.* at 24.

161. *Lake Lillian Holds its Breath Town Awaits Result of the Drilling for Oil*, BRAINERD DAILY DISPATCH, Aug. 25, 1926, at 8.

162. *Revenue Mining Company*, MINNEAPOLIS J., Oct. 2, 1902, at 9.

163. *Paramount Oil & Gas Co., Special Announcement to Investors*, MINNEAPOLIS SUNDAY TRIB., Mar. 24, 1918, at 5.

164. *Morrison & Co., Oil!*, MINNEAPOLIS MORNING TRIB., Sept. 16, 1920, at 17.

Despite this flurry of oil exploration and interest, Minnesota never succeeded in developing a commercial fossil-fuel extraction industry.¹⁶⁵ Today, stock touts like those above would be likely to run headlong into the anti-fraud protection afforded by federal and state securities laws. Indeed, as the oil and gas industry was taking root in Minnesota, the Secretary of State (commenting on corporations generally) strongly called upon laws to end the “constant practice” of companies organized with the “sole object of preying upon the community in order to enrich a few irresponsible schemers.”¹⁶⁶ The prior year, the Secretary of State had noted an “unusually large” number of new corporations formed in 1886 and 1887, attributed to

165. See *Minnesota State Profile and Energy Estimates*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/state/analysis.php?sid=MN> (last updated Apr. 18, 2019) (noting that “Minnesota has no fossil fuel production”).

Most of the natural gas discoveries in Minnesota were accidental. Many were spectacular. A few were tragic. Not one was profitable as a commercial venture. But the incentives are strong, and the search continues. Today, after millions of dollars have been invested in hundreds of wells, and after 100 years of frustration, what have Minnesotans learned? Not nearly enough is the answer that this history would suggest.

Morey, *supra* note 155, at 1.

166. STATE OF MINN., ANN. REP. OF THE SEC’Y OF STATE TO THE LEGIS. OF MINN. FOR THE FISCAL YEAR ENDING JULY 31, 1888, at 70–71.

Another matter of still greater importance is the well known fact that under our present statutes, companies can be organized and legalized with the sole object of preying upon the community in order to enrich a few irresponsible schemers, whose only capital stock is the sanction which the law gives to their enterprise. When a corporation receives on its articles a certificate under the great seal of the state, that it has complied with all the requirements of the law and is authorized to transact business, ordinary people regard that as a certificate of character for which the state, to some extent at least, has become responsible; therefore, as our law now stands it is often the means of deceiving instead of protecting the people, and this department has had abundant evidence that this evil does not exist in theory only but in constant practice. There is an obvious and pressing need of correcting such abuses, so that no corporation which is based upon promises and undertakings to do certain acts in certain future events, can receive the legal sanction of the state until it has been subjected to close scrutiny and given ample guarantee for the fulfillment of its promises.

Id. More broadly, there has been much academic debate about the whether proliferating fraud, or other factors, drove and shaped the early adoption of securities laws. See, e.g., Macey & Miller, *supra* note 133, at 348 (identifying “three separate justifications for blue sky laws,” including: “(1) preventing fraud in the sale of securities; (2) combating market failure arising from informational problems; and (3) paternalism”); Mahoney, *supra* note 133, at 249 (concluding that there is a lack of “evidence that the statutes responded to actual instances of fraud” and that adoption was influenced by lobbying by “broad-based political movements” and more specific interests, such as small banks); Joel Seligman, *The Historical Need for A Mandatory Corporate Disclosure System*, 9 J. CORP. L. 1, 18–33 (1983) (discussing “[p]re-1934 [e]vidence of [c]oncealment or [m]isrepresentation of [m]aterial [i]nvestment [i]nformation”).

“the general prosperity of the State, but especially for its mineral and manufacturing interests.”¹⁶⁷

This backdrop of visionary oil wells and irresponsible corporate schemers may help us understand why the court in *Gopher Tire & Rubber Co.* preferred to adopt a securities definition broad enough to catch any scheme “of such a character as fairly to fall within the scope of the statute,” rather than identify a sharper line.¹⁶⁸ That flexible approach—seeking out the underlying economic reality of a transaction rather than applying a tightly bounded legal test—remains with us in today’s treatment of the term “security.”¹⁶⁹

2. A Brief Summary of Investment Contracts Under Federal Law

Minnesota’s is not the only example of intersection between the energy sector and the development of securities laws. In 1887 Congress passed the Interstate Commerce Act, making railroads the first federally regulated industry.¹⁷⁰ In 1907, the resulting Interstate Commerce Commission recommended amendments to the Act that would require common carriers to receive approval before issuing securities.¹⁷¹ This recommendation was adopted in 1920, marking the first instance of permanent federal securities legislation.¹⁷² The same year, the Federal Water Power Act pulled another regulated industry—power utilities—into the world of federal securities regulation.¹⁷³

Outside of the public utilities realm, the energy industry continued to play a role in defining investment contracts. In 1943, the U.S. Supreme Court considered in *SEC v. Joiner* whether an offer of small undivided oil and gas leasehold interests across a 3000-acre tract in Texas involved the sale of securities.¹⁷⁴ The defendant argued that because the statutory

167. MINN. LEGIS. REP., 1887, *supra* note 155, at 5.

168. *State v. Gopher Tire & Rubber Co.*, 177 N.W. 937, 938 (Minn. 1920).

169. *See infra* notes 213–18 and accompanying text.

170. Interstate Commerce Act, ch. 104, 24 Stat. 379 (1887); *see generally* Thomas W. Merrill, *The Interstate Commerce Act, Administered Contracts, and the Illusion of Comprehensive Regulation*, 95 MARQ. L. REV. 1141, 1141 (2012) (describing the genesis of the Interstate Commerce Act).

171. LOSS ET AL., *supra* note 133, at 49. State regulation of securities issued by public utilities began earlier, in the early 1900s. *Id.* at 33.

172. LOUIS LOSS & JOEL SELIGMAN, *SECURITIES REGULATION* 164 (3d ed. 1998).

173. *Id.* at 914.

174. *SEC v. C. M. Joiner Leasing Corp.*, 320 U.S. 344, 345–46 (1943). *Gopher Tire* and *Joiner* are not the only examples of the definition of a security intersecting with the energy sector. Professor Joseph Long has argued that the risk capital test was first conceived in the context of financing gas station constructions during the 1920s. *See* Long, *supra* note 148, at 169 n.153 (discussing *Brownie Oil Co. of Wis. v. R.R. Comm’n of Wis.*, 240 N.W. 827 (1932) and asserting that the relevant financing “was a common means of financing gas station construction during the 1920’s”).

definition of a security expressly included a “fractional undivided interest in oil, gas or other mineral rights,” it excluded the sale of undivided leaseholds.¹⁷⁵ The Court invoked the concept of an investment contract, and looked at the underlying economic “thread” of the transaction, to reach the conclusion that the leaseholds were indeed securities:

Undisputed facts seem to us however to establish the conclusion that defendants were not as a practical matter offering naked leasehold rights. Had the offer mailed by defendants omitted the economic inducements of the proposed and promised exploration well it would have been a quite different proposition.

...

But defendants offered no such dismal prospect. Their proposition was to sell documents which offered the purchaser a chance, without undue delay or additional cost, of sharing in discovery values which might follow a current exploration enterprise. The drilling of this well was not an unconnected or uncontrolled phenomenon to which salesmen pointed merely to show the possibilities of the offered leases. The exploration enterprise was woven into these leaseholds in both an economic and a legal sense; *the undertaking to drill a well runs through the whole transaction as the thread on which everybody's beads were strung.*

...

It is clear that an economic interest in this well-drilling undertaking was what brought into being the instruments that defendants were selling and gave to the instruments most of their value and all of their lure. The trading in these documents had all the evils inherent in the securities transactions which it was the aim of the Securities Act to end.¹⁷⁶

Three years later, the Court developed the still-dominant federal test for determining whether a transaction involves an investment contract.¹⁷⁷

175. *Joiner*, 320 U.S. at 344–49, 352 (“It is urged that because the [securities] definition mentions ‘fractional undivided interest in oil, gas, or other mineral rights,’ it excludes sales of leasehold subdivisions by parcels.”).

176. *Id.* at 348–49 (emphasis added).

177. *SEC v. W. J. Howey Co.*, 328 U.S. 293, 301 (1946).

SEC v. W. J. Howey Co. did not involve the energy industry.¹⁷⁸ Rather, the Court evaluated a scheme in which a citrus farmer offered to sell grove acreage to prospective customers.¹⁷⁹ Purchasers were also offered—and typically accepted—a service contract under which the citrus farmer harvested and marketed the crops on the customers’ behalf.¹⁸⁰ “Many of these purchasers [were] patrons of a resort hotel owned . . . by the [citrus farmer],” where sales talks were given to interested hotel guests.¹⁸¹

Citing *Gopher Tire & Rubber*, the Court explained that “[f]orm was disregarded for substance and emphasis was placed upon economic reality” when evaluating whether an instrument was an investment contract.¹⁸² For this evaluation, the *Howey* court formulated a four-part test: “[A]n investment contract for purposes of the Securities Act means a contract, transaction or scheme whereby a person”:

- (1) “invests his money”
- (2) “in a common enterprise and”
- (3) “is led to expect profits”
- (4) “solely from the efforts of the promoter or a third party.”¹⁸³

Although the *Joiner* decision did not adopt a formula for the investment contract inquiry, *Howey* explained that the new definition “necessarily underlies this Court’s decision in [*Joiner*].”¹⁸⁴ Applying this test to the citrus grove contracts, the Court held that they:

[C]learly involve[d] investment contracts as so defined [because the transaction offered] . . . something more than fee simple interests in the land, [and] something different from a farm or orchard coupled with management services. They are offering an opportunity to contribute money and to share in the profits of a large citrus fruit enterprise managed and partly owned by respondents. A common enterprise managed by respondents or third parties with adequate personnel and equipment is therefore

178. *See id.* at 294 (“This case involves . . . a citrus grove development . . .”).

179. *Id.* at 295.

180. *See id.* (“Each prospective customer is offered both a land sales contract and a service contract, after having been told that it is not feasible to invest in a grove unless service arrangements are made.”).

181. *Id.* at 296–97.

182. *Id.* at 298 (citing *State v. Gopher Tire & Rubber Co.*, 177 N.W. 937, 938 (1920)).

183. *Id.* at 298–99.

184. *Id.* at 299 (citing *SEC v. C. M. Joiner Leasing Corp.*, 320 U.S. 344, 355 (1943)).

essential if the investors are to achieve their paramount aim of a return on their investments.¹⁸⁵

Underscoring the Court's focus on the economic reality of a transaction, the *Howey* decision concluded with: "The statutory policy of affording broad protection to investors is not to be thwarted by unrealistic and irrelevant formulae."¹⁸⁶ The legacy of *Gopher Tire & Rubber Co.*'s decision not to tightly bound the definition of a security lives on in *Howey*'s assertion that its four-part test "embodies a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits."¹⁸⁷

B. The Rise of the Risk Capital Test as a New Method to Probe Economic Reality

The *Howey* test did not prove to be quite as flexible as intended. In 1961, the California Supreme Court composed a different test in *Silver Hills Country Club v. Sobieski*.¹⁸⁸ Testing the boundaries of the profit element in the *Howey* test and discussion, *Silver Hills* concerned the sale of memberships sold to finance the development of a for-profit country club.¹⁸⁹ Purchasers received the right to use the club facilities, but *not* the right to share in the club's assets or profits.¹⁹⁰ The court held that the memberships were securities as "beneficial interest[s] in title to property," which was one of the enumerated categories of securities under the California statute.¹⁹¹ Rather than profit, the court focused on the concept of "risk capital": "[the statute's] objective is to afford those who risk their capital at least a fair chance of realizing their objectives in legitimate ventures whether or not they expect a return on their capital in one form or another."¹⁹²

Reminiscent of *Joiner*'s explanation that the oil and gas interests were more than naked leasehold interests, and *Howey*'s explanation that the

185. *Id.* at 299–300.

186. *Id.* at 301.

187. *Id.* at 299.

188. *Silver Hills Country Club v. Sobieski*, 361 P.2d 906, 908 (Cal. 1961).

189. *Id.* at 906–07.

190. *Id.* at 907.

191. *See id.* at 908 ("The purchaser of a membership in the present case has a contractual right to use the club facilities that cannot be revoked except for his own misbehavior or failure to pay dues. Such an irrevocable right qualifies as a beneficial interest in title to property within the literal language of subsection (a) of section 25008.").

192. *Id.* at 908–09.

orange farmer was selling more than a fee simple interest in land, *Silver Hills* grounded its holding in the court's view of the economic reality of the transaction:

We have here nothing like the ordinary sale of a right to use existing facilities. Petitioners are soliciting the risk capital with which to develop a business for profit. The purchaser's risk is not lessened merely because the interest he purchases is labelled a membership. Only because he risks his capital along with other purchasers can there be any chance that the benefits of club membership will materialize.¹⁹³

In 1974, the California Supreme Court underscored this focus on risk, this time in the context of a purported "investment contract."¹⁹⁴ In *Hamilton Jewelers v. Department of Corporations*, the court held that a jeweler's offer to sell diamonds for \$500, in conjunction with a promise of a 5% return on the investment, was not a security because the purchase price was no greater than the value of the diamond at the time of purchase.¹⁹⁵ "The customer, being adequately secured, would have placed no 'risk capital'" with the jeweler.¹⁹⁶

Shifting the focus from profit to risk, this risk capital approach appears to be a deviation from the *Howey* test.¹⁹⁷ Indeed, *Howey* expressly rejected speculative risk as a determinative factor:

We reject the suggestion of the Circuit Court of Appeals . . . that an investment contract is necessarily missing where the enterprise is not speculative or promotional in character and where the tangible interest which is sold has intrinsic value independent of the success of the enterprise as a whole. The test is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others. If that test be satisfied, it is immaterial whether the enterprise is speculative or non-speculative, or whether there is a sale of property with or without intrinsic value.¹⁹⁸

193. *Id.* at 908.

194. *Hamilton Jewelers v. Dep't of Corp.*, 37 Cal. App. 3d 330, 333 (Cal. Ct. App. 1974).

195. *Id.* at 336.

196. *Id.*

197. *But see* Hannan & Thomas, *supra* note 133, at 246-47 n.110 (arguing that the *Howey* and risk capital tests are not analytically distinct based on the concept of risk).

198. *SEC v. W. J. Howey Co.*, 328 U.S. 293, 301 (1946).

C. Hawaii Market Center

In 1971, Hawai‘i became the third state to adopt the risk capital test, in *Hawaii Commissioner of Securities v. Hawaii Market Center*.¹⁹⁹ The case concerned a marketing scheme wherein up to 5,000 people could become “founder-member distributor[s]” of an enterprise aiming to open a members-only retail store, by purchasing a sewing machine or a cookware set for more than four times the wholesale value.²⁰⁰ A “distributor” could upgrade to a “supervisor” by purchasing both the sewing machine and the cookware.²⁰¹ The purchaser also executed a contract stating that the founder-member-distributors/supervisors could earn money via mechanisms such as commissions (on sales in the yet-to-be developed retail store) and referral fees (for recruiting or “upgrading” participants).²⁰²

The court evaluated whether this somewhat complicated system, stamped with the hallmarks of a pyramid scheme, was an investment contract.²⁰³ Arguing for the application of the *Howey* test, the defendant argued that the scheme did not involve an investment contract because members did not “expect profits solely from the efforts of others,” *Howey*’s fourth element.²⁰⁴ This argument had succeeded in freeing “Market Center” schemes from blue sky laws in other states.²⁰⁵

Rejecting the “polemics” of the *Howey* formula’s focus on a “narrow concept of investor participation,” and reciting *Gopher Tire & Rubber*’s definition of an investment contract, the court sought to focus on the “economic realities of security transactions.”²⁰⁶ Much like *Howey* had expressed a formula for evaluating investment contracts after *Joiner* did

199. See *Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc.*, 485 P.2d 105, 110–11 (Haw. 1971) (deciding the case roughly two months after Oregon became the second state to adopt the risk capital test); *Oregon ex rel. Healy v. Consumer Bus. Sys., Inc.*, 482 P.2d 549, 552, 554 (Or. Ct. App. 1971) (adopting the risk capital test and discussing how Oregon is the second state to adopt the test); *Silver Hills Country Club v. Sobieski*, 361 P. 2d 906, 908–09 (Cal. 1961) (pronouncing the first version of the risk capital test).

200. *Hawaii Market Center*, 485 P.2d at 107.

201. *Id.*

202. *Id.*

203. *Id.* at 108.

204. *Id.*

205. See *Gallion v. Ala. Mkt. Ctrs., Inc.*, 213 So. 2d 841, 846 (Ala. 1968) (concluding “that the founders contracts involved here are not investment contracts under the Alabama Securities Act”); *Ga. Mkt. Ctrs., Inc. v. Fortson*, 171 S.E.2d 620, 624 (Ga. 1969). In Florida, however, a similar scheme was deemed a security by an appellate court as an “‘interest[] in or under a profit-sharing or participation agreement or scheme’ within the meaning of” Florida’s blue sky law.” *Fla. Disc. Ctrs., Inc. v. Antinori*, 226 So. 2d 693, 695 (Fla. Dist. Ct. App. 1969) (quoting FLA. STAT. ANN. § 517.02(1) (1967)).

206. *Hawaii Market Center*, 485 P.2d at 108–09.

not, the Hawai'i Supreme Court adopted the risk capital approach by deploying an enumerated test:

[A]n investment contract is created whenever:

- (1) An offeree furnishes initial value to an offeror, and
- (2) a portion of this initial value is subjected to the risks of the enterprise, and
- (3) the furnishing of the initial value is induced by the offeror's promises or representations which give rise to a reasonable understanding that a valuable benefit of some kind, over and above the initial value, will accrue to the offeree as a result of the operation of the enterprise, and
- (4) the offeree does not receive the right to exercise practical and actual control over the managerial decisions of the enterprise.²⁰⁷

The court attributed this formula to Professor Ronald Coffey, proposed "in his excellent article analysing the essential economic characteristics of security transactions."²⁰⁸ Applying its new risk capital formula, the court found that the scheme was an investment contract.²⁰⁹ On the first element (initial value) the court explained that the founder-member purchases were not simple merchandise purchases.²¹⁰ Instead, the founder-members had paid a substantial premium for the right to receive future income.²¹¹ Quoting *Joiner's* rationale "[t]he success of the plan is the common 'thread on which everybody's beads [are] strung,'" the court held that "[t]hese overcharges constitute the offerees' investments or contributions of initial value, such value being subjected to the risks of the enterprise."²¹²

On the third element (valuable benefit), the court rejected the defendant's argument that the founder-member's expectations were based on the promise of commissions rather than a share in the enterprise's

207. *Id.* at 109.

208. *Id.* at 109 n.5 (citing Ronald J. Coffey, *The Economic Realities of a Security: Is There a More Meaningful Formula*, 18 W. RES. L. REV. 367, 413 (1967)).

209. *Id.* at 111.

210. *Id.* at 110.

211. *Id.*

212. *Id.* (quoting *SEC v. C. M. Joiner Leasing Corp.*, 320 U.S. 344, 348 (1943)) (second alteration in original).

profits, and therefore the transaction lacked an essential profit element.²¹³ Again citing the *Joiner* decision and the concept of “economic realities,” the court explained that “the fact that in the instant case [Hawaii Market Center] guaranteed the offerees amounts of money independent of enterprise profits does not undermine the investment nature of the transactions.”²¹⁴

On the fourth element (right to exercise managerial control), the court discounted founder-member participation in the enterprise as “minor.”²¹⁵ Citing Coffey’s work, the court explained the need to focus on the quality of the participation.²¹⁶ In order to negate the finding of a security, the offeree should have practical and actual control over the managerial decisions of the enterprise.²¹⁷ For it is this control which gives the offeree the opportunity to safeguard his own investment, thus obviating the need for state intervention.²¹⁸

Finding that the founder-members were “powerless” to protect their original investment because they possessed “none of the incidents of managerial control which would preclude the finding of a security,” the court held that under the economic realities approach the founder-member agreements were investment contracts.²¹⁹

Several months later, the SEC endorsed the *Hawaii Market Center* test in the context of multi-level distributorships and pyramid schemes, noting that the Hawai‘i Supreme Court had “embrac[ed] interpretive principles of the kind laid down by the U.S. Supreme Court in *Howey* and *Joiner*” and opining that the “court’s analysis of the investment-contract concept in the *Hawaii Market Center* case is equally applicable under the Federal securities laws.”²²⁰

Despite this pronouncement from the SEC, the risk capital test has not supplanted the *Howey* test in the federal courts. It remains the minority test, adopted by statute, rule, or decision in at least seventeen jurisdictions.²²¹

213. *See id.* (rejecting the defendant’s narrow definition of profits to find that the transaction did, in fact, include the profit element).

214. *Id.* (citing *Roe v. United States*, 287 F.2d 435, 439 (5th Cir. 1961)).

215. *Id.* at 109, 111.

216. *Id.* at 111 (citing Coffey, *supra* note 208).

217. *Id.*

218. *Id.*

219. *Id.* The court explained that managerial control sufficient to escape the fourth element would include the “power to influence the utilization of accumulated capital” or “authority over decisions which will affect the operation of the store.” *Id.*

220. Multi-Level Distributorships and Pyramid Sales Plans, Securities Act Release No. 5211, Exchange Act Release No. 9387, Fed. Sec. L. Rep. (CCH) ¶ 1048 (Nov. 30, 1971).

221. *See, e.g., Tennessee v. Brewer*, 932 S.W.2d 1, 13 & n.13 (Tenn. Crim. App. 1996) (“From our review of the case law of other jurisdictions, it appears that the *Howey-Forman* test is the majority

Nonetheless, in 1975's decision in *United Housing Foundation, Inc. v. Forman*, the U.S. Supreme Court appeared to bend the *Howey* test toward *Hawaii Market Center*.²²² Finding that cooperative housing residents who had purchased stock in a cooperative housing corporation had purchased neither "stock" nor an "investment contract" within the meaning of the securities definition, the Court once again reiterated that the definition is focused on the economic realities of the transaction.²²³

Apparently realizing that its earlier pronouncement was too rigid, the Court undertook to refine the *Howey* test.²²⁴ To this end, the Court stated that "[t]he touchstone is the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the *entrepreneurial or managerial efforts* of others."²²⁵ "This language effectively deleted the strict 'solely' requirement from the [*Howey*] test in much the same manner as the [Hawai'i] Supreme Court did."²²⁶

In the ensuing decades, the *Hawaii Market Center* formulation has been frequently cited in reference to its formulation of the risk capital test.²²⁷ In 2006, the formula was codified in Hawai'i's version of the Uniform Securities Act.²²⁸

IV. EXPLORING THE ECONOMIC REALITY OF COMMUNITY SOLAR—NOT A SECURITY

The foregoing summary of the investment contract analysis highlights its most important thread, which survived from *Gopher Tire & Rubber* all

rule in the United States. However, the definition pronounced in *Hawaii Market* is also not without support. Its combined *Howey*-risk capital test, or forms substantially similar thereto, has been adopted by at least seventeen jurisdictions. In his treatise on state securities laws, Professor Long states that "it is arguable that this test will eventually replace *Howey*[-*Forman*] as the leading test for investment contracts, at least at the state level." (quoting Joseph C. Long, *Blue Sky Law* § 2.04(4), at 2-146 (1992)) (alteration in original).

222. *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 841-43 (1975).

223. *Id.* at 851, 859-60.

224. *Hawaii Market Center*, 485 P.2d at 108-09.

225. *Forman*, 421 U.S. at 852 (emphasis added).

226. *Brewer*, 932 S.W.2d at 12 (quoting *Forman*, 421 U.S. at 852).

227. *See id.* at 12-13 (noting that "the definition pronounced in *Hawaii Market* is also not without support. Its combined *Howey*-risk capital test, or forms substantially similar thereto, has been adopted by at least seventeen jurisdictions").

228. *See* HAW. REV. STAT. § 485A-102 (Supp. 2017) ("'Security' . . . [i]ncludes any contractual or quasi-contractual arrangement pursuant to which: (A) A person furnishes value, other than services, to an offeror; (B) A portion of that value is subjected to the risk of the offeror's enterprise; (C) The furnishing of that value is induced by the representations of an offeror which give rise to a reasonable understanding that a valuable benefit will accrue to the offeree as a result of the operation of the enterprise; and (D) The offeree does not receive the right to exercise practical and actual control over the management of the enterprise in a meaningful way").

the way through to today's statutory definition in Hawai'i: transactions must be analyzed by focusing on their "economic realit[ies]."²²⁹ Whether using the risk capital test or the *Howey* test, we are admonished not to apply the legal tests mechanically and we are warned against "unrealistic and irrelevant formulae."²³⁰ Indeed, the genesis of the *Hawaii Market Center* test was in Professor Coffey's attempt—"with some trepidation"—to create the risk capital test as "a more complete and reliable shorthand description of the of the economic realities underlying the 'security' concept."²³¹ Coffey joined the chorus in calling out "the problems created when courts and administrative agencies become too enamored of neat formulas handed down from prior opinions and fail to focus on the essential economic considerations relevant to identifying a security."²³²

A. Applying the Risk Capital Test to Community Solar

In Coffey's description, the general approach to identifying a security involves the following master question as a starting point: "What characteristics or features of [the] transaction necessitate its being subject to the rather specialized anti-fraud protection afforded by the securities laws?"²³³ More specifically, Coffey created the risk capital test based on his contention that "risk to initial investment, though not determinative, is the single most important economic characteristic which distinguishes a security from the universe of other transactions."²³⁴

Although this focus on risk is not outwardly embraced by the *Howey* test, risk has undeniably been an important component of the investment contract analysis since its inception; consider again *Gopher Tire & Rubber Co.*'s illustrative list of "visionary oil wells, nonexistent gold mines, and other 'get-rich-quick' schemes" as securities in need of regulation.²³⁵ Risk is a fundamental component of economic reality, and economic reality is the touchstone of the investment contract analysis.²³⁶ Through this lens, the risk capital test is an apt tool for evaluating community solar as a security.

229. SEC v. W. J. Howey Co., 328 U.S. 293, 298 (1946).

230. *Id.* at 301 ("The statutory policy of affording broad protection to investors is not to be thwarted by unrealistic and irrelevant formulae."); *see also* Haw. Comm'r of Sec. v. Haw. Mkt. Ctr., Inc., 485 P.2d 105, 109 (Haw. 1971) ("Any formula which purports to guide courts in determining whether a security exists should recognize this essential reality and be broad enough to fulfill the remedial purposes of the Securities Act.").

231. Coffey, *supra* note 208, at 370.

232. *Id.*

233. *Id.* at 376.

234. *Id.* at 375.

235. State v. Gopher Tire & Rubber Co., 177 N.W. 937, 938 (Minn. 1920).

236. Hannan & Thomas, *supra* note 133, at 227.

In the Parts that follow, I attempt to avoid an overly mechanical application of the four elements of the risk capital test, and instead use each to understand the economic reality of community solar from the perspective of participants. I argue that the conclusion that community solar is likely to be regulated as a security is far less tenable than it might first appear.

1. Initial Value

The first prong of the risk capital test is whether an offeree furnishes “initial value” to an offeror.²³⁷ A rote application of the test to community solar might conclude that if consumers pay (or agree to pay) an enrollment fee or deposit for participating in a community solar project, then “initial value” has been provided.²³⁸ Such rote application is incorrect.

In *Hawaii Market Center*, the court found “initial value” because participants in the pyramid scheme were overcharged a “substantial premium[.]” for merchandise.²³⁹ The premium was “given in consideration for the right to receive future income from the corporation.”²⁴⁰ Without the premium, the transaction presumably could have been characterized as a simple purchase of merchandise, rather than involving risk capital. Indeed, this is exactly the rationale employed in *Hamilton Jewelers* to distinguish its result from *Hawaii Market Center*.²⁴¹ Coffey explained that the “fact that the buyer receives tangible property in return for his value may signal the need for unusually careful analysis.”²⁴² This statement is conceptually related to the observation in *Forman* that “when a purchaser is motivated by a desire to use or consume the item purchased . . . the securities laws do not apply.”²⁴³

Other perspectives on initial value lead to the same result. The concept of an offeree providing initial value is analogous to California’s requirement that a security must involve an offeree providing risk capital to

237. Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc., 485 P.2d 105, 109 (Haw. 1971).

238. Coffey, *supra* note 208, at 380–81.

239. *Hawaii Market Center*, 485 P.2d at 110.

240. *Id.* (stating that “[t]hese overcharges constitute the offerees’ investments or contributions of initial value”).

241. *Hamilton Jewelers v. Cal. Dep’t Corp.*, 37 Cal. App. 3d 330, 336 (Cal. Ct. App. 1974) (stating that “this case is unlike [*Hawaii Market Center*], where the sums invested were disproportionately greater than the wholesale value of the merchandise purchased”).

242. Coffey, *supra* note 208, at 380–81 (noting that “it by no means precludes the possibility that the whole transaction constitutes a security,” and rather that the “the question is still whether the transaction exhibits the ‘economic realities’ of a security”).

243. *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852–53 (1975).

a business enterprise.²⁴⁴ In *Moreland v. Department of Corporations*, the California Court of Appeals applied this requirement to the following scenario: investors agreed to purchase a quantity of gold ore, in conjunction with a contract whereby the seller would refine the ore and provide the refined gold to the purchaser.²⁴⁵ The seller intended to use the sale proceeds “to raise the capital for a new milling and refinery plant.”²⁴⁶ Evaluating the transaction in a variety of ways, the court concluded that notwithstanding the seller’s intention to use the proceeds to construct the mill and refinery, the transaction was fundamentally the sale of a commodity, and not a security.²⁴⁷ It was not a contribution of risk capital to the seller’s mining enterprise.²⁴⁸ The court’s reasoning aptly illustrates the danger of mechanically applying the risk capital elements, pointing out that the intended use of the sale proceeds appeared to “[s]uperficially” satisfy the requirement of soliciting risk capital.²⁴⁹ But in economic reality, “every purchaser of a product from a seller, who reinvests the proceeds of the sale in his business operations, contributes to a seller’s business capital.”²⁵⁰ That concept does not transform a transaction from an ordinary sale into a security.²⁵¹

Applying the initial value prong in this manner, we find it missing in a typical community solar transaction. Consumers do not pay a premium for the solar panels and other equipment in consideration for a later share in profits from the project. Rather, consumers typically purchase or lease an ownership interest in some panels, or an interest in a portion of the project’s power output. Inherently, the future output of those panels defines the value

244. *See* *Moreland v. Cal. Dep’t Corp.*, 239 Cal. Rptr. 558, 566 (Ct. App. 1987) (“The ‘risk capital’ test requires a consideration of the following factors: (1) whether funds are being raised for a business venture or enterprise; (2) whether the transaction is offered indiscriminately to the public at large; (3) whether the investors are substantially powerless to effect the success of the enterprise; and (4) whether the investors’ money is substantially at risk because it is inadequately secured.”).

245. *Id.* at 560. The quantity of refined gold was to be determined by the assayed gold content of the ore. *Id.* at 563.

246. *Id.* at 568.

247. *Id.*

248. *Id.*

249. *Id.*

250. *Id.*

251. *See id.* (“Notwithstanding, such a contribution is an investment in the purchased product and not a contribution of risk capital to a business enterprise within the normal scope of securities regulation. The issue here is whether appellant’s use of the proceeds of sale for the construction of refining facilities changes the essential transaction from an ordinary sale of a commodity to capital participation in a business. We hold that it does not.”). *Cf.* *Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc.*, 485 P.2d 105, 110 (Haw. 1971) (“The salient feature of securities sales is the public solicitation of venture capital to be used in a business enterprise.”) (citing, for example, *Silver Hills Country Club v. Sobieski*, 361 P.2d 906, 908 (Cal. 1961)).

of such an interest, and for community solar that value is realized in the form of future credits on the consumer's electricity bill.²⁵² The prospective nature of this value is fundamental to the operation of solar panels and electricity; in practice, a consumer cannot purchase a batch of solar-generated electrons and store them in a closet until they are needed to light a bulb or power a fridge. The prospective nature of the value is not like a premium paid for sewing machines in *Hawaii Market Center*.²⁵³ Nor is it like a premium paid for prospective value—or not—in visionary oil wells. Rather, it is inherent to the entire concept of solar power generation. This inherent characteristic cannot reasonably turn all community solar interests into securities.

2. Risks of the Enterprise

The second prong of the *Hawaii Market Center* test looks for whether a portion of the initial value is “subjected to the risks of the enterprise.”²⁵⁴ This risk element is a key factor distinguishing a security from other transactions.²⁵⁵

Here again, rote application to community solar yields an all-too-easy conclusion. One can envision a number of scenarios in which a community solar project might not return value to the participants. It might catch on fire. The developer might abscond to Tahiti before the project is complete. The panels might stop functioning. Future electricity prices might fall substantially in comparison to the cost of participating in community solar. These risks are like risks involved in everyday life and everyday commercial transactions.²⁵⁶ They are not like the risks associated with

252. See *infra* note 273 (describing the community solar bill credit mechanism in Hawai'i).

253. See *infra* notes 258–62 and accompanying text (discussing *Hawaii Market Center*).

254. *Hawaii Market Center*, 485 P.2d at 109.

255. See Coffey, *supra* note 208, at 381 (“In the proposed test, one of the most important economic characteristics of a security is the fact that the buyer's initial investment is somehow, considering the effects of the entire transaction, subjected to the risks of an enterprise.”); see also Hannan & Thomas, *supra* note 133, at 241 (asserting that “in determining whether or not a security is involved in a particular transaction, analysis of the type, character, and allocation of the risk of loss provides a reliable barometer”).

256. Cf. Hannan & Thomas, *supra* note 133, at 242 (“Risk analysis is also helpful in distinguishing between normal ‘commercial’ risks, which lie outside the purview of the [securities] acts, and investment type risks, which fall within the definition of the term security. The reality of our market place is that nearly all businesses ultimately finance themselves by obtaining public funds through the sale of goods or services. Whenever some future performance is promised to the customer of an enterprise, there is the commercial risk that the promisor will not perform or that intervening insolvency of the promisor will prevent or delay the performance. These types of ‘normal’ commercial risks, without more, do not shift the principal risk to the customer.”).

investing in visionary oil wells.²⁵⁷ Nor are they like the risks considered in *Hawaii Market Center*.²⁵⁸ That case involved a pyramid scheme.²⁵⁹ Founder-members would recoup their initial investment and earn income from recruiting others, and perhaps collecting commissions on sales in the yet-to-be-developed retail store.²⁶⁰ The court observed that the recruitment scheme increased geometrically and was capped at 5,000 founder-members.²⁶¹ Therefore, most founder-members would not be able to collect sufficient recruitment fees to recoup their investment; their return would be determined by sales in the store.²⁶² They would receive essentially no return on their investment if the store was not built: “the security of the founder-members’ investments is inseparable from the risks of the enterprise.”²⁶³ Quoting *Joiner*, the court reasoned that the “success of the [retail store] plan is the common ‘thread on which everybody’s beads [are] strung.’”²⁶⁴

This citation to *Joiner* invites us to even more directly consider the visionary oil wells scenario. Recall that *Joiner* involved the sale of individual mineral leaseholds scattered through a large tract of land.²⁶⁵ The leaseholds were deemed securities because they were coupled with a promise to engage in oil exploration—and perhaps more precisely, the

257. Cf. Robert A. Brown, *Investing in Oil and Gas Drilling*, 16 ALTA. L. REV. 232, 236, 241–42 (1978) (describing a range of factors involved in creating the “high risk” of investing in the oil and gas business).

258. See *Hawaii Market Center*, 485 P.2d at 109 (applying the risk capital test to transactions “motivated by the need to raise capital to finance the opening of the proposed Hawaii Market Center store”).

259. See, e.g., Frank M. Hull, *Pyramid Marketing Plans and Consumer Protection: State and Federal Regulation*, 21 J. PUB. L. 445, 456–57 (1972) (describing the *Hawaii Market Center* scenario as a pyramid scheme).

260. *Hawaii Market Center*, 485 P.2d at 107.

261. *Id.* at 110.

The recruitment fee paid to distributors and supervisors, during the pre-operational phase of the plan, rests upon the promoters’ ability to sell the success of the plan to prospective members. In addition, those members who choose to rely solely on the second method of earning income, the payment of commissions based on sales, receive no return at all on their investment unless the store functions successfully. This latter point is particularly important because recruitment of members increases geometrically. Therefore, since membership is limited to five thousand, a very large percentage of founder-members will be totally dependent on sales commissions to recover their initial investment plus income. It is thus apparent that the security of the founder-members’ investments is inseparable from the risks of the enterprise.

Id.

262. *Id.* at 107.

263. *Id.*

264. *Id.* (quoting SEC v. C. M. Joiner Leasing Corp., 320 U.S. 344, 348 (1943)) (alteration in original).

265. *Joiner*, 320 U.S. at 345.

speculative chance that a well on a particular leasehold would strike oil. This formed the economic “thread” of the transaction.²⁶⁶ The Court even noted that during the drafting of the federal securities laws, oil and gas rights “were notorious subjects of speculation and fraud.”²⁶⁷

California’s approach to risk capital again lends additional context. In *Moreland*, the court believed that the gold investors were “adequately secured against the risk [seller] might default in his performance under the refining contract.”²⁶⁸ Much like the *Hawaii Market Center* reasoning, the California court observed that investors did not pay a premium for a future promise of refined gold.²⁶⁹ Instead, they received a right to receive an adequate quantity of ore based upon its assayed gold content.²⁷⁰ Even though the investor’s profitability was not ensured, the court held that the investment was adequately secured, further cementing the conclusion that the purchasers did not place risk capital with the seller.²⁷¹

Any of these threads illustrate that to properly understand the economic realities of community solar, we must do more than simply identify *some* type of risk to community participants. We must more carefully scrutinize the economic thread underlying community solar and search for insight on the type, character, and allocation of the risk.²⁷²

The success of a community solar project does not depend on speculation that a well will strike oil, nor on speculation that a retail store will successfully generate sales. Rather, the common economic thread of community solar is found in a regulated community solar tariff or program overseen by a public utilities regulator. Participants typically recoup their investment via an approved regulatory tariff, specifying the manner in which participants will receive electric bill credits in proportion to electricity generated by the solar panels.²⁷³ Thus, participants’ risk is

266. *Id.* at 348.

267. *Id.* at 352.

268. *Moreland v. Dep’t of Corps.*, 239 Cal. Rptr. 558, 568–69 (Ct. App. 1987).

269. *Id.* at 569.

270. *Id.*

271. *Id.*; see also *People v. Figueroa*, 715 P.2d 680, 696 (Cal. 1986) (“Thus, for example, ‘where the investor receives adequate collateral, no risk capital is contributed to the managerial efforts of the promoter and such business transaction does not come within the Corporate Securities Law.’” (first quoting *People v. Schock*, 199 Cal. Rptr. 327, 331 (Ct. App. 1984); then citing *Hamilton Jewelers v. Cal. Dep’t Corp.*, 112 Cal. Rptr. 387, 390–91 (Ct. App. 1974))).

272. See generally *Hannan & Thomas*, *supra* note 133, at 224.

273. See PUC Adopted Framework, *supra* note 76, at att. A 28 (“The bill credit shall be calculated as follows: Bill Credit (\$) = Bill Credit Rate (\$/kWh) x Subscription (Subscriber’s percentage of total [community solar] Facility capacity) x [community solar facility] Output (actual monthly . . . output in kWh)”; see also NREL, SHARED SOLAR, *supra* note 96, at vi (“Electricity benefits are typically allocated on a capacity or energy-production basis. Participants in capacity-based programs own, lease, or subscribe to a specified number of panels or a portion of the system and

fundamentally limited to whether or not the panels will generate electricity. Through this lens, the pertinent risks are (1) the proposed project might not be built; and (2) once built, the project will not generate sufficient power.

In Hawai‘i, an escrow requirement protects participants from the first risk.²⁷⁴ Pre-development enrollment fees or deposits must be kept in an escrow account, and will not be released to developers until the project realizes commercial operation.²⁷⁵ Even without an escrow requirement, when a community solar participant receives a contractual right to solar panels or their power output, that right should *adequately secure* their interest in the sense utilized in *Moreland*.²⁷⁶

The risk that a project will not continue generating power is also mitigated. As a general matter, solar panels have a long lifespan.²⁷⁷ As a growing body of field data corroborates this durability over longer and longer lifespans, solar module warranties have increased accordingly; a typical solar panel warranty can cover 25 years.²⁷⁸ In Hawai‘i’s community solar program, the details of such equipment warranties must be disclosed to participants.²⁷⁹

This functional durability allows our focus to shift to risks associated with a project developer. In *TriVectra v. Ushijima*, the Hawai‘i Supreme Court affirmed the finding of an investment contract security in part

typically receive electricity or monetary credits in proportion to their share of the project.”). In the Hawai‘i regulators’ approach, participants’ risk is further bounded because the bill credit is fixed for the term of the contracted participation. *See* PUC Adopted Program Framework, *supra* note 76, at 81 (explaining that bill “credit rates are fixed for the term of the Standard Contract”).

274. PUC Adopted Framework, *supra* note 76, at att. A 29.

275. *Id.* at att. A 28–29 (“[Community solar] [s]ubscribers will be required to enter into an appropriate [subscriber agreement] with the [community solar] Subscriber Organization. The Agreement . . . shall contain standard information and provisions that ensure transparency and proper consumer protection. The Agreement must include, at minimum, the following elements: . . . Use of escrow account to hold any pre-development enrollment fees or deposits, which will be released to the Subscriber Organization upon commercial operation . . .”). This is also relevant to the first prong of the test, concerning *initial value*; until the project is actually generating the power promised to the consumer, *no value* is provided to the developer, irrespective of whether such value would be viewed as a premium in the sense of *Hawaii Market Center*.

276. Other consumer protections are also likely to apply. For example, Hawai‘i’s community solar framework requires that when developers apply for the program, they must “[d]emonstrate/establish financial creditworthiness through posting of a surety bond, a financial guarantee, a letter of credit, or other sufficient evidence of financial ability to develop the project.” *Id.* at att. A 17.

277. *See generally* D.C. Jordan et al., *Photovoltaic Failure and Degradation Modes*, 25 PROGRESS IN PHOTOVOLTAICS: RES. APPLICATIONS 318, 324 (2017) (reporting photovoltaic failure rates in the range of other consumer products, but that their long lifetime makes direct comparison difficult).

278. *Cf.* D.C. Jordan & S.R. Kurtz, *Photovoltaic Degradation Rates—An Analytical Review*, 21 PROGRESS IN PHOTOVOLTAICS: RES. APPLICATIONS 12, 16 fig. 4 (2011) (illustrating the evolution of a “typical” warranty).

279. *See* PUC Adopted Program Framework, *supra* note 76, at att. A 26.

because the participants “could only realize a return if [the seller, a website operator,] remained viable and sufficiently capitalized to honor its . . . commitments.”²⁸⁰ But *TriVectra*, properly viewed, counsels that community solar is not a security. Once a solar project reaches commercial operation, it makes little difference whether the original developer remains viable. While participants will undoubtedly want some entity to conduct maintenance if necessary and to provide the utility with accounting information sufficient to allocate energy credits, that function could be satisfied by any number of entities (including, if necessary and prudent, the electric utility). In economic reality, the participants’ risk with respect to the ongoing participation of the original developer is even lower than in other commercial contexts.

Perhaps because of the durability of a solar project and the fungibility of its operator, Hawai‘i’s community solar framework relies largely on a required consumer disclosure checklist to address the long-term risks of power production.²⁸¹ In addition to disclosing equipment warranties and other information, that checklist requires developers to provide an output guarantee, including a “[d]efinition of underperformance and a description of the compensation to be paid by the [community solar developer] for any underperformance.”²⁸² Buttrussing this output guarantee, developers must also provide: (1) information about the type and level of insurance for the project, and the insurance benefits that protect participants; (2) proof and description of a long-term maintenance plan; and (3) assurances that all installations, upgrades, and repairs will be completed under the direct supervision of qualified professionals, in accordance with industry standards and manufacturer recommendations.²⁸³ This community solar process abounds with other disclosures too. For example, agreements between participants and a developer must include information about the developer’s identity, the credit rate to be applied to the participant’s bill, and information about how that credit will be calculated.²⁸⁴

280. See *TriVectra v. Ushijima*, 144 P.3d 1, 11 (Haw. 2006) (stating that “members could only realize a return if [the promoter] remained viable and sufficiently capitalized to honor its . . . commitments” and that “[a]ccordingly, the commissioner was not wrong in concluding that the members’ initial value investments were subject to the risks of the enterprise”).

281. PUC Adopted Program Framework, *supra* note 76, at att. A 25–26.

282. *Id.* at att. A 26.

283. *Id.* at att. A 25–26.

284. *Id.* at att. A 29. Hawai‘i’s community solar framework also mandates that participants will be allowed to transfer their bill credits from address to address if they move within an electric utility’s service territory, at no cost to the participant. *Id.* Transfers from one utility customer to another customer are also allowed at a price disclosed in the original agreement between the participant and developer. *Id.* at att. A 30. Finally, participants also receive the right to exit the program by selling their interest back to the developer at a price pre-set in the agreement. *Id.*

Hawai‘i’s Securities Commissioner has described that, “[d]isclosure is at the center of securities regulation.”²⁸⁵

The Securities Act provides for disclosure through its registration process. In the Securities Act the Hawaii State Legislature included a list of the information and records required for registering a security. This list has been tailored to meet the minimum disclosure that an investor would need in order to be properly informed about a particular security and the person selling it.²⁸⁶

This standard registration process is designed for standard securities. In comparison to the disclosures tailored by the Public Utilities Commission specifically for community solar,²⁸⁷ general securities disclosures seem likely to provide substantially weaker consumer protections. In economic reality, the level of consumer risk implicated in community solar simply does not rise to a level of a visionary oil well requiring regulation as a security.

3. Promise of a Valuable Benefit

Despite Coffey’s focus on the element of risk as the defining characteristic of a security, it has not been the focal point of discussion for community solar.²⁸⁸ Instead, that focus has often been on whether participants are motivated by the promise of “profit[.]”²⁸⁹ This element arises directly in the *Howey* test.²⁹⁰ To be deemed a security, the investment must be “premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.”²⁹¹ Applying the risk capital test, this profit motive takes the shape of expecting a “valuable benefit.”²⁹²

CommunitySun’s successful request for a no-action letter did not mention “risk.”²⁹³ The word “profit,” however, was used more than twenty

285. Nohara Letter, *supra* note 103, at 4.

286. *Id.*

287. *Id.*

288. Coffey, *supra* note 208, at 375.

289. *Id.*

290. *See* SEC v. W. J. Howey Co., 328 U.S. 293, 301 (1946) (“Such persons have no desire to occupy the land or develop it themselves; they are attracted solely by the prospects of a return on their investment.”).

291. *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852 (1975).

292. Coffey, *supra* note 208, at 377.

293. Maco Letter, *supra* note 98.

times, and the request's leading argument was that participants did not expect a profit.²⁹⁴

No reasonable expectation of profits exists and no entrepreneurial efforts of others is present in this case, since the owners are motivated by the ability to self-generate and self-consume a commodity and by the corresponding reduction in the overall cost of energy that they are consuming. The owner of a SolarCondo will not be paid by the utility for the electricity generated by a SolarCondo, other than by an offset against the bill for electricity consumed by the owner on property within the applicable utility district. The owner of a SolarCondo cannot even carry over his energy credits for other than a limited time, and can never sell or trade his energy credits, again confirming no reasonable expectation of profit.²⁹⁵

Nonetheless, the CommunitySun developer acknowledged that participants may benefit from lower electricity bills, or that the relative value of their participation could go up over time, if electricity rates rise.²⁹⁶

For the risk capital test, Hawai'i's Securities Commissioner suggested that the *Howey* profit motive is narrower than the concept of a "valuable benefit":

Hawaii Market Center's four-part definition of an investment contract differs from *Howey's* in several ways. The most relevant difference to a [community solar] project is *Hawaii Market Center's* third prong of the definition, which states that the investor has a "reasonable understanding that a valuable benefit will accrue . . ." *Howey* does not require a "valuable benefit" but instead requires an expectation of a "profit." Therefore, analysis of an investment contract in a jurisdiction following *Hawaii Market Center* will be broader in this way than in jurisdictions that follow *Howey*.²⁹⁷

The electric utilities echoed this suggestion.²⁹⁸ But this argument is somewhat difficult to reconcile with the way the phrases "valuable benefit"

294. *Id.* at 10–11.

295. *Id.* at 14.

296. *Id.* at 11–12. Note that the inverse is also true: the value of participation in community solar could go down over time, if electricity rates fall.

297. Nohara Letter, *supra* note 103 (second alteration in original).

298. See HECO Comments on Second PUC Proposal, *supra* note 87, at 32–33 ("Additionally, the Securities Commissioner noted that Hawai'i's test for securities was broader than the federal test

and “profit” have been used and interpreted. Courts applying the *Howey* test have acknowledged that “profit” can mean “something other than a share of the profits of an enterprise in a narrow accounting sense,”²⁹⁹ and “have recognized securities sales even where the promised benefits to the offeree were indirect, arising from an anticipated increase in the value of the property received, rather than direct payments from the offeror.”³⁰⁰

This conceptual convergence is the mirror image of an analytical problem with too broadly interpreting “valuable benefit.” We can presume that *all* transactions in goods are motivated by the buyer’s perception that the purchased good will yield a valuable benefit. If the same is true for securities, then this element adds little utility to the risk capital test. This also drives the need for *Forman*’s recognition that the securities definition does not apply when a purchaser “is motivated by a desire to use or consume the item purchased.”³⁰¹

In almost any context, probing a purchaser’s motivation is tricky business. For community solar, this may be a particularly difficult challenge. The economic reality of a community solar project is that the participants in any one project may have divergent motivations, and that each individual participant may have multiple motivations.³⁰² CommunitySun argued that participants may be motivated by lower energy costs *and* a perception of independence (i.e., “the ability to self-generate and self-consume a commodity”).³⁰³ Other consumers might be motivated by the prospect of less volatile energy costs.³⁰⁴ Some participants may be motivated by the perceived benefit of acquiring renewable power rather than fossil-fuel power, and by the associated reduction in greenhouse gas emissions.³⁰⁵ And yet others may be motivated by community-focused facets of a project. For example, a participant may be motivated by the

such that an interest that may not be a ‘security’ under the federal test could be deemed a ‘security’ under the Hawaii test.”)

299. See Hannan & Thomas, *supra* note 133, at 238 (“The term ‘profits’ should not be construed restrictive. It is apparent from decisions subsequent to *Howey* that the return promised for the use of the investors’ money may be something other than a share of the profits of an enterprise in a narrow accounting sense.” (first citing *SEC v. United Benefit Life Ins. Co.*, 387 U.S. 202 (1967); then citing *SEC v. Variable Annuity Life Ins. Co.*, 359 U.S. 65, 74 (1959); then citing *L.A. Tr. Deed & Mortg. Exch. v. SEC*, 285 F.2d 162, 167 (9th Cir. 1960))).

300. *Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc.*, 485 P.2d 105, 110 (Haw. 1971) (first citing *SEC v. C. M. Joiner Leasing Corp.*, 320 U.S. 344, 348–49 (1943); then citing *Roe v. United States*, 287 F.2d 435, 439 (5th Cir. 1961)).

301. *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852–53 (1975).

302. See Maco Letter, *supra* note 98, at 11–12 (describing various motivations for participating in community solar).

303. *Id.* at 11, 14.

304. *Id.* at 11.

305. *Id.*

prospect of providing power to a community center or church just as much as they are motivated by the promise of credits on their own electric bill.

This entire palette of potential motivations involves the perception that participants are acquiring a valuable benefit in the broad sense. An overly broad application of the valuable benefit element is incapable of discerning which of these motivations renders the transaction more like a security. It also fails to identify a decision-making hierarchy for transactions motivated by a combination of primary, secondary, or tertiary factors. Most fundamentally, it fails to identify the economic realities of the transaction.

Coffey's risk capital formulation avoided this tangled complexity by recognizing that the importance of the valuable benefit element can be viewed as inversely proportional to the degree of risk.³⁰⁶ “[A]s the degree of risk to initial value increases, the need for a well-defined ‘profit’ motive lessens.”³⁰⁷ On this sliding inverse scale, it should also be true that where there is a low degree of risk to initial value, one needs to find a highly defined profit motive before finding a security.³⁰⁸ This too can help to elucidate a more principled line between transactions in goods and securities, and to show why community solar is not a security. The relatively low risk associated with community solar means that we should search for a well-defined profit motive. The diffuse web of potentially interlocking community solar motivations simply does not provide the necessary level of definition.

The most *profit-like* benefit associated with community solar is the prospect of electric bill savings. Arguments in favor of classifying community solar as a security, resting on this premise, should be burdened with first establishing a significant level of systemic risk. Further, those arguments should be required to connect electricity savings to a well-defined profit motive that is separate from the motive of cost-effective self-consumption.

Analogizing to cooperative apartment arrangements (co-ops) illustrates how difficult it would be to satisfy such a burden. Co-op purchasers transfer money in exchange for a share in the co-op entity and the right to use a dwelling unit.³⁰⁹ Despite superficial similarities to purchasing shares in a business, Coffey pointed to an opinion of the Arizona Attorney General to

306. Coffey, *supra* note 208, at 375–76.

307. *Id.* at 401.

308. *But see id.* at 400 (“[I]t is difficult to say with certainty that a transaction involving a high degree of risk to initial investment, but lacking the expectation of profits, will be not be called a security.”).

309. *See, e.g.,* United Hous. Found., Inc. v. Forman, 421 U.S. 837, 842 (1975) (describing the co-op housing model).

explain why these arrangements are not securities, and perhaps predicted the *Forman* decision to come seven years later: “no profit or income is generally anticipated.”³¹⁰ Instead, much as community solar participants benefit by consuming power, co-op purchasers benefit by living in the unit. The fact that living in the co-op might be less expensive than other housing options does not transform the co-op arrangement into a security.

A second apartment analogy, involving condominium units (condos), similarly shows why community solar interests are not securities. Condo purchasers typically obtain a dwelling unit and the right to use common areas of the development. In this context, the SEC has opined that condominiums offered in conjunction with ancillary rental arrangements—such as rental pools, exclusive rental agents, or limitations on owner occupancy—can involve the offer of an investment contract.³¹¹ Conversely, if the purchaser has an unrestricted right to use the unit, or if it is offered without ancillary rental arrangements, the transaction is not a security.³¹² A similar principle appears to hold in other contexts, such as trading stamps, streetcar tokens, railroad tickets, meal tickets, theatre tickets, and other examples “too numerous to mention.”³¹³

Community solar participants can receive a valuable benefit in a variety of forms, including offsetting their power consumption with the project’s power generation. The fact that this may—or may not—be less expensive than other sources of power should have very little bearing on whether or not community solar is regulated as a security.

4. Right to Exercise Control

In the fourth element of the *Hawaii Market Center* test, an investment contract requires that “the offeree does not receive the right to exercise practical and actual control over the managerial decisions of the

310. Coffey, *supra* note 208, at 399 n.138 (citing Op. Ariz. Att’y Gen., [1961] Blue Sky L. Rep. (CCH) ¶ 70554).

311. Guidelines as to the Applicability of the Federal Securities Laws to Offers and Sales of Condominiums or Units in a Real Estate Development, Securities Act Release No. 5347, 1973 WL 158443, at 3–4 (Jan. 4, 1973) [hereinafter SEC Condo Guidelines]. Interestingly, although this analysis applies the *Howey* test, in several places it appears to utilize the phrase “economic benefits” interchangeably with “profits.” *Id.* at 2–3.

312. *Id.* at 2.

313. Trading Stamps, 17 C.F.R. § 231.3890 (1958) (rejecting the argument that trading stamps, redeemable for cash or merchandise are “evidence of indebtedness” and thus within the securities definition; noting that “the same argument could be made as to streetcar tokens, meal tickets, Christmas gift certificates, box tops, railroad or theatre tickets and others too numerous to mention;” and concluding that “[t]he legislative history and other provisions of the statute indicate that the Congress did not intend to include such items within the scope of the statute”).

enterprise.”³¹⁴ Here again, a superficial analysis might find a security, since community solar participants are unlikely to undertake technical and accounting control of a solar facility. But the SEC’s condominium guidance clarified that “a continuing affiliation between the developers or promoters of a project and the project by reason of maintenance arrangements *does not* make the unit a security.”³¹⁵ Similarly, a community solar developer’s continuing role in maintaining the production of solar power and accounting for electricity credits should not transform community solar into a security.

A peek into the economic realities of community solar reinforces this conclusion. Much like in the valuable benefit analysis, we should recognize that community solar participants must first consume energy before that consumption can be offset by accumulated community solar credits. These credits are a critical part of the *capital* that powers the community solar value chain—“the thread on which everybody’s beads [are] strung.”³¹⁶ Community solar participants exercise control over whether those credits are utilized and monetized by controlling their electricity consumption.³¹⁷ This control suggests again that community solar is not a security.

The Court of Appeals of Georgia, applying the risk capital test to a property development syndicate, made a similar observation about an

314. Haw. Comm’r of Sec. v. Haw. Mkt. Ctr., Inc., 485 P.2d 105, 109 (Haw. 1971).

315. SEC Condo Guidelines, *supra* note 311, at 4 (emphasis added).

316. SEC v. C. M. Joiner Leasing Corp., 320 U.S. 344, 349 (1943).

317. In Hawai’i’s community solar program, the bill credits are forfeited annually if the consumers’ credits exceed their electricity consumption and other charges. *See* PUC Adopted Program Framework, *supra* note 76, at att. A 28 (“If the monthly net credit exceeds the eligible charges, the value of excess credits will be rolled over month-to-month. Annually, all remaining bill credits will be extinguished.”). The treatment of excess credits is a typical detail in distributed solar tariffs and is addressed differently in various jurisdictions. Similarly, not all community solar programs utilize the same approach as Hawai’i’s. In Colorado, for example, excess credits may carry over from year to year, but will expire when the consumer terminates service with the applicable utility. *See Net Metering*, N.C. STATE UNIV. CLEAN ENERGY TECH. CTR.: DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY, <http://programs.dsireusa.org/system/program/detail/271> (last updated Nov. 30, 2018) (describing characteristics of Colorado’s community solar model). In Minnesota, excess bill credits similarly carry over from month to month. *See* MINN. HOUSE OF REP., XCEL ENERGY’S COMMUNITY SOLAR GARDEN PROGRAM 7 (2017) (describing characteristics of Minnesota’s community solar model). But because of statutory language requiring that the utility purchase all energy generated by community solar projects, the utility is required to annually purchase all outstanding credits. *Id.* While this provides a measure of consumer protection, it also partially de-links consumer control over credit utilization. That control is not completely de-linked, however; the maximum size of a community solar subscription is based on the consumer’s average consumption over the prior 24 months. Order Rejecting Xcel’s Solar-Garden Tariff Filing and Requiring the Company to File a Revised Solar-Garden Plan at 16, *In re* Petition of Northern States Power Company, dba Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, No. E-002/M-13-867 (Minn. Pub. Util. Comm’n Apr. 7, 2014).

investment's value chain.³¹⁸ Searching for indicia of the managerial control, the court noted that "the power to make the ultimate decision: to sell or not to sell" is a critical determinant.³¹⁹ Where investors retain a contractual right to control that decision, it cuts against finding a security.

In the context of franchise investments, similar rationale has led to the conclusion that a franchise agreement is not a security, even if marketed, in part, as an opportunity for "investment, and/or absentee ownership," if "the franchisee exercises policy-making power over *his unit* of the enterprise."³²⁰ This concept has also been utilized in other contexts, where contractual managerial rights have been found to negate a finding of a security irrespective of whether or not an investor actually exercises those managerial rights.³²¹

Rhetorically, this might clash with *Hawaii Market Center's* admonition that "[i]n order to negate the finding of a security the offeree should have *practical and actual* control over the managerial decisions of the enterprise."³²² And the phrase "managerial decisions of the enterprise"³²³

318. See generally *D. K. Properties, Inc. v. Osborne*, 240 S.E.2d 293, 296 (Ga. Ct. App. 1977) (evaluating whether a property development syndicate agreement is a security).

319. See *id.* (finding that "[s]ince the investors did have such control over that essential decision from which they expected profits to flow, the trial court erred in holding that, as a matter of law, the appellants' scheme involved the sale of unregistered securities"). But see William J. Carney & Barbara G. Fraser, *Defining a Security: Georgia's Struggle with the Risk Capital Test*, 30 EMORY L.J. 73, 118 (1981) (criticizing the approach in *D. K. Properties* as elevating "form over substance" for focusing more on "who contributes the essential managerial efforts" than the "principal efforts" influencing success or failure—perhaps performed even before the syndicate was formed). Note that the court in *D. K. Properties* also declined to conclude, without additional evidence, that "in economic reality, the [promoters] did *not* perform the essential managerial functions from which profits were to be expected," and therefore declined to hold as a matter of law that the sale of land did not involve the sale of securities. *D. K. Properties, Inc.*, 240 S.E.2d at 296–97.

320. See *Wieboldt v. Metz*, 355 F. Supp. 255, 260 (S.D.N.Y. 1973) (emphasis added) (explaining that "it is only necessary that the franchisee exercise policy-making power over his unit of the enterprise, since to require control over the franchisor's entire system is incompatible with the franchising method and would make all franchises investment contracts"). The court also noted that other parts of the marketing material did not convey the same sense of completely passive investment. See *id.* ("At the very least, the typical franchise gives the franchisee sufficient input into decisions which determine his enterprise's economic viability to distinguish him from the passive investor protected by the Acts.").

321. See *J & S Enters. v. Warshawsky*, 714 F. Supp. 278, 281 (N.D. Ohio 1989) (applying the "control" element and noting that the interest of a general partner "would appear to fail the managerial control test" because a general partner retains managerial rights, irrespective of whether or not an investor actually exercises those managerial rights); see also *Brannon v. Rinzler*, 603 N.E.2d 1049, 1052 (Ohio Ct. App. 1991) (concluding that a general partnership agreement provided rights to managerial control "sufficient to satisfy the last prong of the test and find the investment to not be a security under Ohio law").

322. *Haw. Comm'r of Sec. v. Haw. Mkt. Ctr., Inc.*, 485 P.2d 105, 111 (Haw. 1971) (emphasis added).

323. *Id.*

may yield the sense that the relevant control must relate to centralized decision-making, rather than control over a single component in an enterprise's value chain.

Wrangling over the degree and quality of control necessary to negate a security, the Ninth Circuit Court of Appeals in *SEC v. Glenn W. Turner Enterprises, Inc.* noted *Hawaii Market Center's* criticism of *Howey's* "solely from the efforts of others" element.³²⁴ Evaluating a "gigantic and successful fraud" involving a commission-based scheme to sell self-motivation seminars and tapes, the court reasoned that it would be "easy to evade [a strict interpretation of 'solely'] by adding a requirement that the buyer contribute a modicum of effort."³²⁵ Thus, the court deployed "a more realistic test, whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise."³²⁶

This was the standard applied by CommunitySun, arguing that consumers' benefit—in the form of lower energy bills—derives from retail energy price fluctuations, rather than the "entrepreneurial or managerial efforts of others."³²⁷ The Georgia court in *D. K. Properties* also used this "essential managerial efforts" approach, and called it the "basic policy" underlying both the risk capital and *Howey* tests.³²⁸ Applying that policy to the economic realities of community solar, participants' control over a critical component of the value chain counsels against finding a security.

B. The Folly of Relying on Registration Exemptions

Are community solar interests securities? I conclude that they are not. Both of the four-part investment contracts tests are presented in the conjunctive. A persuasive argument on any one of the four elements will remove community solar from the definition of an investment contract. Looking beyond a mechanical application of the tests to hypothetical scenarios, and instead focusing on economic realities of Hawai'i's approved framework, it becomes clear that neither the securities laws nor their exemptions are a good fit for community solar. At the same time, it

324. *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973) (citations omitted).

325. *Id.* at 478, 482 ("Strict interpretation of the requirement that profits to be earned must come 'solely' from the efforts of others has been subject to criticism. Adherence to such an interpretation could result in a mechanical, unduly restrictive view of what is and what is not an investment contract.")

326. *Id.* at 482.

327. Maco Letter, *supra* note 198, at 12.

328. *D. K. Properties, Inc. v. Osborne*, 240 S.E.2d 293, 295–96 (Ga. Ct. App. 1977).

becomes less clear that additional layers of regulatory disclosures, beyond those tailored by energy regulators specifically for community solar, would add any meaningful or necessary consumer protection.³²⁹

In simpler terms, community solar projects are not like visionary oil wells. Nonetheless, legal arguments, standing alone, cannot eliminate the barrier of securities *uncertainty* among communities and solar developers. Indeed, even a definitive regulatory determination in the CommunitySun example failed to address that uncertainty sufficiently.³³⁰ Resolving this uncertainty in a traditional manner would perhaps require more generalized regulatory guidance (from both federal and state regulators), akin to the SEC guidelines that helped to provide certainty for the condominium industry.³³¹ Another solution, of course, would be a long trip through litigation. Such litigation could commence in the form of a regulatory action against a community group or developer for offering an unregistered security. Or it could perhaps arise from a securities fraud claim prosecuted by a community solar participant. Either path would threaten to chill community solar growth until the uncertainty is resolved.

Vermont and Oregon have adopted regulatory and legislative exemptions, respectively, from the states' blue sky laws that are intended to apply to some community solar models.³³² However, it is not clear that such exemptions have been widely utilized, and both have been criticized.³³³

329. The same argument can also apply to the securities laws' anti-fraud provisions. In the context of community solar in Hawai'i, it does not appear that those provisions would add a substantial layer of civil consumer protections over laws applicable to non-securities—such as remedies available to any consumer for unfair or deceptive trade practices or unfair methods of competition. *See* HAW. REV. STAT. §§ 480-2, -13 (2018) (providing a private right of action for consumers and enabling the recovery of treble damages and attorney's fees). Moreover, if community solar is classified as a security, those remedies may not be available. *See* *Spinner Corp. v. Princeville Dev. Corp.*, 849 F.2d 388, 393 (9th Cir. 1988) (“We conclude that the Hawaii Supreme Court, if confronted with the question whether Hawaii’s baby FTC act applies to claims arising from securities transactions, would hold that it does not. We are persuaded by the structure of the statute, the legislative command to refer to federal FTCA jurisprudence, the existence of Hawaii statutes that cover securities transactions, and the trend of the relatively few applicable judicial decisions.”).

330. *See, e.g.*, HECO Comments on Second PUC Proposal, *supra* note 87, at 34 (“[D]espite the existence of an SEC-issued ‘no-action’ letter found with respect to a community solar interest developed by solar developer, Community Sun LLC, there has been no other ‘no-action’ letter issued for any other community solar program offered in the multiple jurisdictions that offer community solar programs. Essentially, despite what stakeholders and developers may attest, the ‘securities’ issue with respect to these programs is untested and unknown.”).

331. Professor Williamson Chang has proposed sweeping changes to the problematic definition of a security, which if enacted may more fundamentally address the problem of securities uncertainty. *See* Chang, *supra* note 133, at 420–21.

332. *See* Vermont SUN Exemption 1, *supra* note 101 (providing exemptions for community solar projects that meet one of four sets of criteria, under a “consumer exemption,” a “financing exemption,” a “commercial exemption,” or a “de minimis exemption”); OR. REV. STAT. § 59.025(12)

The most frequently proffered solution on this issue is for community solar projects to qualify for the more generalized exemptions from registration requirements.³³⁴ Those exemptions are far from a panacea. They do not solve the barrier of complexity and uncertainty for community groups, who would need to seek legal advice from a securities practitioner irrespective of whether they are registering a community solar project as a security, or obtaining an exemption from registration. Moreover, exemptions do not necessarily resolve the complexity created by the interplay between federal securities laws and the blue sky laws. Some securities can be exempt from registration under federal law, but still require registration (or exemption) under state law.³³⁵ Other federal exemptions preempt state law.³³⁶

(2018) (exempting solar cooperatives only); OR. ADMIN. R. §§ 441-025-0120 to -0126 (2018) (prescribing requirements to qualify for the statutory exemption).

333. See *Part 5: Can Securities Exemptions Eliminate Community Solar Obstacles?*, *supra* note 95 (asserting that Oregon's adoption of a statutory exemption painted a picture that is "neither complete nor completely rosy," that it "remains to be seen whether [regulatory] restrictions will relieve much, if any, of the major securities filings obstacles," that the statutory exemption applies only to the cooperative community solar model, and that "[i]n order to incentivize a broader scope of potential community solar models . . . other structures may need similar exemptions"); Letter from Kyra Hill & Nick Lawton, Energy Fellow, Lewis & Clark L. Sch., Green Energy Inst., to Shelley Greiner, Rules Coordinator, Or. Div. Fin. Reg. (Sep. 12, 2014), <https://law.lclark.edu/live/files/17985-gei-comments-on-securities-exemption-rules> (questioning, for example, the costs of compliance and the exemption's limitation on advertising to prospective participants, and promoting the more liberal approach taken in the Vermont SUN exemption). Professor Jennifer Taub has evaluated the Vermont SUN exemption from the perspective of whether it might be expanded to other forms of social investment capital, and she cautions that its impacts on individual and residential participants should be closely monitored before such an expansion. Jennifer Taub, *New Hopes and Hazards for Social Investment Crowdfunding*, in *LAW AND POLICY FOR A NEW ECONOMY* 165, 183–84 (Melissa K. Scanlan ed., 2017).

334. See, e.g., NREL, *SHARED SOLAR*, *supra* note 96, at vii ("The most relevant exemptions for shared solar programs are Regulation D, including Rule 506 . . . and Rule 504, the intrastate exemption, and exemptions related to nonprofits); Booth, *supra* note 94, at 787–800 (discussing possible exemptions from the federal Securities Act's registration requirements).

335. See, e.g., 15 U.S.C. § 77c(a)(11) (2012) (providing a federal, but not state, exemption for intrastate transactions).

336. Professor Rutherford Campbell has prepared this succinct summary of the state of federal preemption with respect to blue sky laws:

In summary, state authority over registration has been eliminated with respect to: (1) offerings under Rule 506 (now including public offerings, if purchasers are limited to "accredited investors"); (2) offerings by issuers of its securities that are traded on a national exchange; (3) Tier 2 Regulation A+ offerings; and (4) crowdfunding offerings of up to \$1 million offered only over the Internet. Essentially all other securities offerings by issuers are subject to state registration requirements. These include: (1) registered offerings by issuers of securities that are not traded on a national exchange; (2) private placements under the common law of section 4(a)(2); (3) offerings under Rule 504; (4) offerings under Rule 505; (5) Tier 1 offerings under Regulation A+; and (6) intrastate offerings under Rule 147.

Similarly, an initial offering of a security may be exempt from registration, but re-sales may not.³³⁷ This is an especially relevant complexity for community solar, where the transferability of an interest is an important consumer protection, since a participant may leave the applicable utility service territory.³³⁸

Some exemptions utilize the concept of accredited or sophisticated investors.³³⁹ These concepts have limited applicability for community solar projects that are focused on serving participants from low-income communities.

Whether community solar interests are securities is a complex question. It may seem enticing to sidestep that question with a de-risking approach that utilizes exemptions. But that approach actually adds layers of complexity, inflexibility, and potentially incompatible constraints. This solution cannot scale community solar in a way that realizes its potential to provide a community-focused energy solution.

CONCLUSION—COMMUNITY SOLAR AND SECURITIES AS AN OPPORTUNITY TO OPERATIONALIZE ENERGY JUSTICE

Rather than try to fit community solar's *square peg* into *round holes* within the securities laws, a much more direct and appropriate solution would be to establish that community solar is not an investment contract. Of course, as noted earlier, this should not apply to every conceivable formulation of community solar.³⁴⁰ Rather, it should focus on community solar implemented as a tariff or program already regulated by electric utility regulators. This comparatively simple and bright line would eliminate the specter of stifling uncertainty and duplicative regulation, while ensuring that every form of community solar is subject to the oversight of some regulatory regime. This approach borrows from the balance adopted for electric utilities themselves, where utility regulators have exercised

Campbell, *Blue Sky Laws*, *supra* note 118, at 622–23.

337. *See, e.g.*, 17 C.F.R. § 230.502 (2018) (prescribing that “securities acquired in [an exempt] transaction under Regulation D shall have the status of securities acquired in a transaction under section 4(a)(2) of the Act and cannot be resold without registration under the Act or an exemption therefrom”).

338. *See* PUC Adopted Program Framework, *supra* note 76, at att. A 29–30 (providing a process for subscriber transfer or exit).

339. *See, e.g.*, 17 C.F.R. § 230.506(b)–(c) (2018) (enabling exemptions for accredited investors, or a limited number of sophisticated investors, with sufficient income or net worth).

340. *See supra* notes 134–38 and accompanying text (discussing a community solar structure under which it is likely that community solar interests would be securities).

oversight over some securities issues since before the adoption of federal securities laws.³⁴¹

More fundamentally and more forward-looking, this formulation of regulatory responsibilities can succeed in advancing the community solar and securities debate into the 21st century. While I have attempted to faithfully apply the risk capital and *Howey* tests to the economic realities of community solar, I also acknowledge those tests are rooted in 20th century notions more relevant to visionary oil wells than they are to modern concepts of energy justice.

In other words, the arguments in this Article have been largely (and intentionally) presented in the wrong frame. Energy justice is at the core of community solar's *raison d'être*.³⁴² Energy justice principles should also be fundamental to resolving questions about its implementation. Implementing energy justice means, in part, advancing energy decisions and debates beyond law and policy frames that are all too often "limited to the domains of engineering and economics."³⁴³

It is likely a step too far to ask securities regulators to dive into the principles of energy justice. But for utility regulators, as the U.S. energy system undergoes a renewable energy transition,³⁴⁴ those principles should be at the forefront of the debate. Utility regulators who rise to this task will be far better positioned to understand the energy needs of the low-income and vulnerable communities that *true* community solar is designed to serve, and to design disclosures and other program features that are tailored to those needs. These realities call for a solution that definitively removes regulated utility programs and tariffs from the definition of a security. This could be accomplished by legislation or by regulatory guidance, although in practice it would likely require coordinated federal and state action to avoid re-creating the complexity of competing securities definitions.

Reframing the regulatory boundaries in this way could also have implications far beyond community solar. The future electric grid is

341. See LOSS & SELIGMAN, *supra* note 172, at 914–19 (describing the role of utility regulators in overseeing securities issues, before the 2005 repeal of the Public Utility Holding Company Act Pub. L. No. 74–333, 49 Stat. 803); see also HAW. REV. STAT. § 269-17 (2018) (requiring Public Utilities Commission approval for the issuance of securities by a public utility corporation).

342. See *supra* notes 49–62 and accompanying text.

343. See Sovacool et al., *Energy Decisions Reframed as Justice and Ethical Concerns*, 1 NATURE ENERGY 16, 16 (2016) (investigating “how concepts from justice and ethics can inform energy decision-making”).

344. For example, New York's Reforming the Energy Vision proceeding involves a wide-ranging set of initiatives intended to “consider fundamental changes in the manner in which utilities provide service . . . including the relationships among utilities and customers, bulk markets, and regulators.” See Order Instituting Proceeding at 4, *In re Reforming the Energy Vision*, No. 14-M-0101 (N.Y. Pub. Serv. Comm'n Apr. 25, 2014).

envisioned to be far more participatory than today, balanced by an untold number of micro-transactions that will enable consumers to be both buyers and sellers of energy and energy grid services.³⁴⁵ Energy justice principles require us to design that participatory electricity grid in a way that ensures equitable access, availability, and affordability.³⁴⁶ How will low-income and vulnerable communities be invited and empowered to participate? Will access and power be skewed in favor of single-family homeowners, sophisticated investors, or other privileged classes? Or will the grid of the future create a fairer and more robust method for all to participate in the enormously important economic and social fabric of the energy sector?

These questions will undoubtedly require further analysis and debate. And interestingly, securities laws may be as applicable in that debate as they are to community solar. Many envision that a participatory electric grid will be mediated by digital blockchain transactions.³⁴⁷ It remains uncertain whether such digital tokens are within the definition of a security.³⁴⁸ If transactions use such digital tokens on a regulated grid, that use should be removed from the definition of a security.

Resolving the securities uncertainties proactively, and with a focus on justice principles, is not too much to ask. The intellectual roots of securities laws are concerned with the perils of concentrating economic power in the hands of a small group, accountability, and a sense of fiduciary obligation toward public interests.³⁴⁹ These concepts are equally familiar to public

345. See generally Eisen & Mormann, *supra* note 25, at 114–15 (envisioning a system “that enables some ratepayers to actively participate in and benefit from the newly created markets”); see also Welton, *Clean Electrification*, *supra* note 30 (noting that “leading states are working to make the grid ‘participatory’”).

346. See, e.g., Eisen & Mormann, *supra* note 25, at 114–15 (arguing that an electricity trading paradigm “will, on the whole, prove more equitable than the current system”).

347. See, e.g., James Blanden & Michael Cottrell, *How Utilities Are Using Blockchain to Modernize the Grid*, HARV. BUS. REV. (Mar. 23, 2017), <https://hbr.org/2017/03/how-utilities-are-using-blockchain-to-modernize-the-grid> (“Blockchain has grabbed the attention of the heavily regulated power industry as it braces for an energy revolution in which both utilities and consumers will produce and sell electricity. Blockchain could offer a reliable, low-cost way for financial or operational transactions to be recorded and validated across a distributed network with no central point of authority.”).

348. For example, in December 2018, the Token Taxonomy Act was introduced in Congress. H.R. 7356, 115th Cong. (2d Sess. 2018). The Act would remove digital tokens from the definition of a security under the federal securities acts. See *id.* Mirroring some of the uncertainty in the community solar context, at least one state—Wyoming—has already exempted blockchain tokens from its blue sky law. See WYO. STAT. ANN. § 17-4-206 (2018); see generally Nate Crosser, Comment, *Initial Coin Offerings As Investment Contracts: Are Blockchain Utility Tokens Securities?*, 67 U. KAN. L. REV. 379 (2018) (analyzing whether the SEC should treat digital tokens as securities).

349. See Cynthia Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1212–23 (1999) (“The issues of primary concern . . . were the concentration of economic power in the hands of a small group of bankers, corporate executives, and

utility regulators and lie at the heart of innovative community-focused energy solutions.

directors; management's lack of accountability to the company's shareholders; and the lack of public accountability or concern for the public among those wielding concentrated power."').