Senate Bill 1078: The Renewable Portfolio Standard—

California Asserts Its Renewable Energy Leadership

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California recently adopted a Renewable Portfolio Standard in hopes of stabilizing its energy market and promoting a stronger renewable energy industry. Senate Bill 1078 aims to achieve these elusive goals by mandating a significant increase in the procurement of renewable energy by retail electricity sellers. The law as written, however, poses several hurdles that must be overcome by careful implementation. If the Energy Commission can establish a workable benchmark pricing methodology, avoid preemption by the federal Public Utility Regulatory Policy Act, and create an effective enforcement mechanism, California could once again become the national leader in pursuing a renewable energy future.

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INTRODUCTION

Recently rocked by energy shortages, blackouts and skyrocketing energy rates, California has revisited its quest to stabilize its energy markets. One of the greatest lessons learned from the most recent energy crisis is that California needs to diversify its energy portfolio.1 A recent report by the Rand Corporation demonstrates that because virtually all new power plants supplying California's energy needs are powered by natural gas, diversification is essential to prevent another crisis from creating soaring prices and power shortages.2 Many observers believe that effective implementation of the state's recently enacted Renewable Portfolio Standard (RPS) is the only way to effectively diversify California's energy market to avoid another energy disaster.3

An RPS requires retail electricity sellers to include in their resource portfolios a determined percentage of renewable energy sources, such as wind, solar, and geothermal.4 Now that California has passed its version of an RPS contained in Senate Bill 1078 (SB 1078), the question remains whether it can accomplish its laudable goals.

This Comment sheds light on the implications and potential of the California RPS. First, a brief history of energy law and policy in both the United States and California explains the context essential to

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understanding the challenges faced in implementation of an RPS. Section II lays out the RPS concept by reviewing its theoretical framework and by exploring adoption of RPSs across the United States. Section III contains an in-depth explanation of California’s RPS, highlighting the strengths of its mandate and the areas of concern for its implementation. Last, this Comment analyzes three specific areas which promise to be controversial as state agencies implement California’s RPS: The difficult task of determining benchmark pricing for the program, the necessity of avoiding preemption by the federal Public Utilities Regulatory Policy Act, and the importance of creating an effective enforcement regime. The message is a hopeful one. With careful implementation, California’s new RPS can propel the State to a bright renewable energy future.

I. BACKGROUND

A. National Context

Electricity development in California and the United States has undergone three distinct policy phases. It began a century ago with the “utility consensus,” a period in which the federal and state governments regulated investor-owned utilities as natural monopolies.5 During the utility consensus, the electrical utilities agreed to provide a stable energy supply at a reasonable price in return for the authority to operate noncompetitive electricity franchises.6

The second phase began in the 1970s after three major stresses precipitated the erosion of the utility consensus.7 First, an “arrest of technological progress” in electricity generation technology curtailed industrial expansion.8 Second, the Oil Embargo of 1973 triggered a severe energy crisis that highlighted the fragility of the United States’ dependence on Middle East oil.9 Third, the modern environmental movement secured a role in mainstream politics, introducing a new set of values that questioned the sustainability of fossil-fuel dependency.10

5. Richard F. Hirsh, Power Loss: The Origins of Deregulation and Restructuring in the American Electric Utility System 11 (2001). The term “utility” refers to large, investor-owned electricity supply companies that to this day control the vast majority of electricity markets throughout the United States.
6. Id.
7. Id. at 70-71.
8. Hirsh explains that diminishing advances in technologies, combined with a tendency for utility managers to purchase larger, less efficient, less reliable generation units, caused a “technological stasis” that made the utility consensus less appealing. Id. at 55-58.
9. Id. at 58-63.
10. Id. at 63-64.
These stresses resulted in the utility consensus giving way to a new era of nontraditional, non–utility energy production.\textsuperscript{11} The erosion of the utility consensus was marked by Congress’ enactment of the Public Utility Regulatory Policy Act of 1978 (PURPA).\textsuperscript{12} To reduce dependence on foreign oil, promote alternative energy sources and energy efficiency, and diversify the electric power industry, PURPA encouraged new technologies by removing long–established barriers created by monopoly control of energy markets.\textsuperscript{13} By requiring utilities to buy all the electricity produced by Qualifying Facilities (QFs), including small, independent cogeneration and renewable energy facilities, the law cracked open the market to non–utility power producers.\textsuperscript{14} A critical limitation on PURPA’s QF–purchasing mandate was that utilities could not be forced to pay more for QF power than “avoided costs,” the cost of equivalent non–QF power.\textsuperscript{15} PURPA’s avoided–cost provision would later impede California’s attempts to promote renewable energy, as national policy shifted toward favoring competitive energy markets through deregulation.\textsuperscript{16}

The Energy Policy Act of 1992 marked the beginning of deregulation, the third and current phase, by empowering non–utility wholesale power generators to compete free of the regulations designed to control utilities.\textsuperscript{17} The passage of this Act set in motion a state–by–state experiment that sought to establish efficient, competitive, free market energy economies.


\textsuperscript{13} Public Utilities Regulatory Policy Act, 16 U.S.C. § 2611 (2000); see also HIRSH, \textit{supra} note 5, at 87.

\textsuperscript{14} HIRSH, \textit{supra} note 5, at 87; see also Union of Concerned Scientists, \textit{Backgrounder: Public Utility Regulatory Policy Act (PURPA), at http://www.ucsusa.org/clean_energy/ renewable_energy/page.cfm?pageID=119 (last updated Oct. 26, 2002). Cogeneration systems use parallel generators to increase the overall efficiency of a traditional power plant. By harnessing the waste heat from a primary generator, cogenerators create power from what would normally be released as waste.

\textsuperscript{15} The Federal Energy Regulatory Commission, the agency charged with administering PURPA has defined avoided costs as “the incremental costs to an electric utility of electric energy or capacity, or both, which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source.” 18 C.F.R. § 292.101(b)(6) (1994).

\textsuperscript{16} See infra Part II(B)(2) (discussing federal preemption of a California renewable energy plan in 1995).

B. California’s Energy Policy

1. Consistent Promotion Of Renewable Energy

California has a rich history as a national leader in promoting nontraditional energy approaches.18 Prior to the energy crisis of 1973, the California legislature introduced plans to create the California Energy Commission (Commission) in part to coordinate conservation activities and sponsor research and development of renewable energy technologies.19 Although this original attempt to create the Commission failed due to a Reagan veto, the legislature succeeded after reintroducing the proposal in 1974.20 In 1976, California initiated a significant departure from the utility consensus by passing the Small Power Act, which, like PURPA, encouraged nontraditional power sources such as cogeneration.21 Thus, it is not surprising that when Congress passed PURPA in 1978, the California Public Utilities Commission (CPUC) quickly embraced the law and implemented mechanisms to encourage entrance of QFs into the energy market.22

In 1991, the California legislature took a further step to promote renewable energy by building a renewable energy mandate into the Public Utilities Code, requiring that environmental values be incorporated into the energy procurement process for all regulated utilities and requiring that a portion of the state’s total energy portfolio be derived from renewable sources.23 This mandate was solidified in California’s 1996 energy industry restructuring bill, Assembly Bill 1890 (AB 1890), which, among its provisions created the Renewable Energy Fund and provided $540 million in subsidies and incentives for renewable

18. HIRSH, supra note 5, at 93.
19. Id. at 94.
21. HIRSH, supra note 5, at 95.
23. CAL. PUB. UTIL. CODE § 701.3 (Deering 2003). The provision states: “Until the commission completes an electric generation procurement methodology that values the environmental and diversity costs and benefits associated with various generation technologies, the commission shall direct that a specific portion of future electrical generating capacity needed for California be reserved or set aside for renewable resources.” Id.
energy producers, purchasers, and providers.\textsuperscript{24} Even against the backdrop of deregulation and California's recent energy crisis,\textsuperscript{25} policy makers in the state have repeatedly struggled to make California a renewable energy leader.

2. Struggles With Federal Preemption

It has not always been smooth sailing for California. The State's innovative energy policies have in the past met resistance from the federal government. For example, California's 1992 Biennial Resource Plan Update (BRPU), a complex process undertaken by the CPUC to provide affordable energy while incorporating environmental costs and benefits, was found to violate PURPA.\textsuperscript{26} The Federal Energy Regulatory Commission (FERC) determined that the BRPU violated PURPA by requiring utilities to purchase QF power above "avoided costs," creating a discriminatory market subsidy contrary to PURPA.\textsuperscript{27} This illegally prevented nonrenewable resources from competing with QF resources in the bidding for power purchase agreements.\textsuperscript{28}

As a result of FERC's decision, California had to open power purchase bidding to all sources without conferring any advantage to renewable producers for the environmental benefits they provided. By requiring renewable QFs to compete with nonrenewable facilities, such as gas-fired power plants, FERC rendered much renewable energy production financially infeasible.\textsuperscript{29} This left many renewable energy producers, which had relied on the promise of energy contracts under the


\textsuperscript{25} For a definitive explanation about deregulation and California's energy crisis, see Duane, supra note 11.


\textsuperscript{27} 70 F.E.R.C. 61215 at 61677. See supra note 15.

\textsuperscript{28} F.E.R.C. clarified that "avoided cost" must be set considering all sources of energy, not just QF energy. S. Cal. Edison Co., 70 F.E.R.C. 61215, 61677. It is also essential to recognize that 1995 was the "zenith" of the California deregulation fervor, thus the decision was considered by many to be a "quite politicized effort to kill any state requirements" in the name of wholesale and retail competition. Telephone Interview with Matthew Freedman, Attorney, The Utility Reform Network (Dec. 2, 2002).

\textsuperscript{29} Telephone Interview with John White, Executive Director, Center for Energy Environment & Renewable Technology (Sept. 24, 2002).
BRPU process, sitting on the sidelines, despite having power ready for the grid. FERC's ruling torpedoed the state's intention to support renewables, and California was forced to redesign its methods to encourage renewable energy development without violating federal law.

Since the failure of the BRPU, California has begun writing a new chapter in its efforts to fulfill its statutory renewable energy mandate. Assembly Bill 57, passed in September of 2002, provided for the creation of diversified electricity procurement plans. AB 57's plan for procurement of renewable energy resources provided, in turn, the model for California's version of the Renewable Portfolio Standard.

II. THE RENEWABLE PORTFOLIO STANDARD: HISTORY AND THEORY

A. How An RPS Works

A Renewable Portfolio Standard is a progressive, market-based policy that encourages the development and incorporation of cost-competitive renewable energy into the mainstream energy market. It aims to create a minimum market for renewable energy resources and to encourage fuel diversity, energy security, economic development, and environmental benefits. An RPS obligates retail electricity sellers to include in their resource portfolios a determined percentage of renewable energy sources, such as wind, solar, and geothermal. Percentage requirements can be met through a variety of methods. The National Association of Regulatory Utility Commissioners describes the three main methods: energy retailers can satisfy RPS obligations by

32. AB 57 added Section 454.5 to the Public Utility Code:
The electrical corporation will, in order to fulfill its unmet resource needs and in furtherance of Section 701.3, until a 20 percent renewable resources portfolio is achieved, procure renewable energy resources with the goal of ensuring that at least an additional 1 percent per year of the electricity sold by the electrical corporation is generated from renewable energy resources, provided sufficient funds are made available pursuant to Section 399.6, to cover the above-market costs for new renewable energy resources.

Id. This above-market cost provision became a critical element in the structure of California's RPS—necessitating the creation of a "benchmark" to determine market costs—an issue that will undoubtedly be very contentious as California's new RPS is implemented.
34. The term "portfolio" refers to the mix of energy resources that a retail seller utilizes to provide electricity to its customers. RADER & HEMPLING, supra note 4, at 1-2.
35. Id. at 1.
owning a renewable energy facility, purchasing power from another facility, or trading obligations through a system of tradable renewable energy credits. Experts recognize an RPS as the ideal policy tool for encouraging renewable energy development in restructuring competitive markets.

Some renewable energy advocates view the RPS as a superior policy mechanism for promoting healthy and sustainable energy markets because of its ability to accomplish policy objectives—such as correcting market failures, overcoming market barriers for new technologies, and encouraging sustainable development—while staying true to the market-based approach of supplying energy at the least cost. An RPS brings renewable energy into the mainstream by carving out a piece of the market for which renewable suppliers must compete for through a competitive bidding process. This removes prohibitive market barriers while creating the most efficient, cost-effective method of introducing renewable energy into the market.

Another advantage of an RPS is its ability to interact with established renewable energy policies such as a Public Goods Charge. This is a fee collected directly from consumers through electricity bills to support renewable energy projects, energy efficient services, and low-income programs. This separate state policy can be used to subsidize uncompetitive, emerging technologies to facilitate their entrance into the energy market. Many states, including California, have passed

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36. Id. at 2. As viewed by many RPS proponents, Renewable Energy Credits are a vital part of a successful RPS because a credit system creates a commodity that represents the environmental benefits gained from renewable energy and ensures that renewable generation companies receive payment for those benefits. Union of Concerned Scientists, Background: Renewables Portfolio Standard: Elements of the RPS, at http://www.ucsusa.org/clean_energy/renewable_energy/page.cfm?pageID=102 (last updated Feb. 11, 2002). A credit system also encourages renewable energy to become more cost competitive. Taking advantage of economies of scale in energy markets, by permitting renewable producers to sell credits to non-renewable energy producers, allows for the fulfillment of RPS goals while keeping the cost of renewable energy production down.


39. Id. at 45.

40. Id.


42. RADER & HEMPLING, supra note 4, at 30.
restructuring legislation that incorporate Public Goods Charges to support renewable energy.43

B. State-By-State Approach To RPS Implementation

Several states preceded California in adopting an RPS, including Arizona, Connecticut, Maine, Massachusetts, Nevada, New Jersey, New Mexico, Texas, Pennsylvania, Wisconsin, Iowa, and Minnesota.44 This state-by-state approach has resulted in a variety of mechanisms and commitment levels. In February 2001, for example, the Arizona Corporation Commission adopted an RPS requiring only 1.1 percent of energy to be derived from renewables by 2007.45 By contrast, in June 2001, Nevada Governor Kenny Guinn signed what was at that time the country’s most aggressive RPS. It required fifteen percent of all electricity generated in Nevada to be derived from new renewables by the year 2013.46

The Texas RPS, however, is viewed as the model RPS and is credited with helping to forge one of the United States’ leading wind power markets.47 The success of the Texas program, which will likely surpass its modest mandate of just under 3% renewables by 2009, has been attributed to a few key design principles.48 These principles include strong legislative and Texas Public Utility Commission commitment to its implementation,49 an effective enforcement mechanism,50 predictable

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47. WISER & LANGNISS, supra note 37, at 4; Interview with Nancy Rader, Executive Director, California Wind Energy Association, in Berkeley, Cal. (Sept. 12, 2002). The Texas RPS was incorporated into the Texas Public Utilities Commission Rules § 25.173 Goal for Renewable Energy. TEX. UTIL. CODE ANN. § 39.904 (Vernon 2003).

48. WISER & LANGNISS, supra note 37, at 14.

49. Such political support is viewed as vital to ensuring that the policy design details are carefully crafted. Id. at 14.

50. Id. Under the Texas RPS, retail electricity suppliers that fail to meet their obligation face sure and strong penalties: the non-compliance penalty is set to the lesser of five cents per missing kWh or 200% of the mean trade value of certificates in the compliance period. Id.
long-term purchase obligations that drive new development, and moderate flexibility that ensures energy suppliers are able to meet the RPS mandate in a cost-effective manner. The Texas RPS also incorporates a system of tradable renewable energy credits that, although yet to prove essential for the program’s success, will likely ease the tracking of compliance for enforcement purposes, improve liquidity in the market, and increase the competitiveness of Texas renewables by lowering their overall cost.

C. A Federal RPS Proposal

Congress recently debated the adoption of a federal RPS. On April 25, 2002, the Democrat-controlled Senate passed a federal RPS as part of a broad energy bill. The Senate’s RPS requires an additional 1% of the nation’s electricity to come from new renewable energy sources by 2005, rising steadily until renewable energy provides 10% of US electricity by 2020. The bill was passed to a House–Senate conference committee to resolve differences between it and the House–passed energy bill, which lacked an RPS provision. Vast differences between House and Senate versions of energy legislation, however, prohibited the passage of a federal RPS.

51. Id. "Without long-term contracts, renewable energy developers are faced with the unenviable position of developing merchant renewable energy projects with highly uncertain returns." Id. at 11.
52. Several key features build flexibility into the Texas RPS including: Compliance measured on a yearly basis, a three-month “true-up” period, renewable energy credit (REC) banking for up to two years after issuance, and limited REC borrowing. Id. at 14–15.
53. Id.
57. HR 4, 107th Cong. (2001); Am. Wind Energy Ass’n, supra note 55.
A. California Passes The Most Aggressive State RPS To Date

After a failed attempt in 2001, California enacted its RPS in the autumn of 2002. First introduced as SB 532 by Senator Byron Sher (D-Saratoga) in February 2001, the original RPS bill passed the state Senate but failed in the Assembly Utilities and Commerce Committee in the last week of session.\(^59\) Riding a wave of public support,\(^60\) the 2002 version (SB 1078) passed the Assembly on August 29 by a vote of 55 to 23, and it passed the Senate on August 31 by a vote of 24 to 11.\(^61\) Governor Gray Davis signed the California RPS into law on September 12, 2002.\(^62\)

The fundamental elements of SB 1078 place California among the leading RPS states in the quest for a sustainable energy future. By mandating that investor-owned utilities\(^63\) and other "retail sellers" obtain twenty percent of their energy portfolios from renewable energy by no later than 2017,\(^64\) SB 1078 is the most aggressive state-adopted RPS to date.\(^65\) Additionally, the RPS's requirement that electrical corporations contract with renewable energy generators for at least ten years\(^66\) ensures that burgeoning renewable technologies are guaranteed not only an entrance into the energy market, but also sufficient time to settle into the market as viable, competitive, long-term resources.


60. Polls have shown that 85% of the state's population is in favor of the bill; 75% are in favor even if it means higher utility bills. The Osgood File: California utilities may soon he required to get 20 percent of their energy from renewable resource (CBS Radio Network radio broadcast, June 26, 2002) at http://www.acnewsrouce.org/environment/renewable_require.html.


64. SB 1078 § 3, 2001 Sen., Reg. Sess. (Cal. 2002) (amending CAL. PUB. UTIL. CODE § 399.12(b) (Deering 2003)). Southern California Edison and Pacific Gas & Electric will likely reach the 20% goal long before the 2017 deadline because both utilities already obtain close to 10% of their energy from renewables.

65. See supra Part II(B).

66. SB 1078 § 3 (amending CAL. PUB. UTIL. CODE § 399.14(a)(4)).
Passage of California’s RPS did require some compromise. Several significant changes between rejection of SB 532 and passage of SB 1078 made the enacted RPS less aggressive than early advocates had hoped. SB 1078 slows down the original schedule for the incorporation of renewables into the market,67 eliminates the credit trading system,68 and replaces SB532’s significant mandatory monetary penalty with a discretionary contempt penalty for non-compliance.69 While the adopted RPS is not as revolutionary as initially conceived, it retains the basic elements needed to fulfill the intent of the legislature— to “promote stable electricity prices, protect public health, improve environmental quality, stimulate sustainable economic development, create new employment opportunities, and reduce reliance on imported fuels.”70

B. Provisions That May Limit RPS Efficacy

SB 1078 is filled with a complex set of provisions designed to satisfy party interests while taking into account California’s complex energy history. However, a few provisions may hinder the accomplishment of the bill’s goals. For example, the RPS provides for flexible attainment of its goals, including a shortfall-compensation provision that allows an electrical corporation to procure additional eligible renewable energy resources in subsequent years to compensate for a shortfall in a previous year.71 And while a degree of flexibility, such as that provided by the Texas RPS, may be a strength, the broad provisions of California’s RPS leave so much room for electrical corporations to fall behind on their obligations that continuing compliance may become impractical.72

67. SB 1078 requires a total procurement of eligible resources such that 20% of its retail sales are procured no later than December 31, 2017. Id. (amending CAL. PUB. UTIL. CODE § 399.15(b)(1)). SB 532 sought an even faster conversion to renewables: 20% by 2010. SB 532 § 1, 2001 Sen., Reg. Sess. (Cal.) (proposing to amend CAL. PUB. UTIL. CODE § 25465.5(a)(6)(A)(v)).

68. See SB 532, which included a provision requiring the CPUC to establish a renewable credit trading system for the RPS. SB 532 § 1 (proposing to amend CAL. PUB. UTIL. CODE § 24565.3). While not included in SB 1078, a credit trading system is not explicitly barred.

69. SB 1078 requires the CPUC to “exercise its authority pursuant to Section 2113 to require compliance.” SB 1078 § 3 (amending CAL. PUB. UTIL. CODE § 399.14(d)). California Public Utilities Code Section 2113 states, “Every public utility, corporation . . . which fails to comply with any part of any . . . regulation . . . is in contempt of the commission, and is punishable by the commission for contempt in the same manner and to the same extent as contempt is punished by courts of record.” CAL. PUB. UTIL. CODE § 2113 (Deering 2003). SB 532 provided for a concrete penalty of “at least twice the cost of compliance as determined by the commission,” a penalty similar to that in the Texas RPS. SB 532 § 1 (proposing to amend CAL. PUB. UTIL. CODE § 25465.5(c)).

70. SB 1078 § 3 (amending CAL. PUB. UTIL. CODE § 399.11(b)).

71. SB 1078 § 3 (amending CAL. PUB. UTIL. CODE § 399.15(b)(3)).

72. See supra note 52, and accompanying text.
The RPS also exempts electric corporations that are not creditworthy. Thus, because Pacific Gas & Electric is engaged in ongoing bankruptcy proceedings, and Southern California Edison currently teeters on the edge of bankruptcy, a very large portion of California's retail energy may be exempt from the RPS as it takes effect in January 2003.

Another provision that could limit the efficacy of the RPS is one requiring the Energy Commission to provide "supplemental energy payments" from the New Renewable Resources Account, created with California's restructuring in 1996 and funded through the Public Goods Charge. This provision ensures that energy corporations will not bear the burden of above-market costs of renewable energy sources. If sufficient funds are not available to offset those costs, the Energy Commission must allow electrical corporations to limit their annual procurement obligation.

To ensure that such funds would be available, the legislature passed SB 1038, a companion bill to SB 1078 that authorized renewable energy funding measures. This increased the percentage of Public Goods

73. SB 1078 § 3 (amending CAL. PUB. UTIL. CODE § 399.14(a)(1)).
77. Id. (amending CAL. PUB. UTIL. CODE § 399.15(b)(4)). This section provides that if supplemental energy payments from the Energy Commission . . . are insufficient to cover the above–market costs of eligible renewable energy resources, the commission shall allow an electrical corporation to limit its annual procurement obligation to the quantity of eligible renewable energy resources that can be procured with available supplemental energy payments.

Id. Inclusion of this provision proved to be a point of contention among groups advocating for the RPS. See Memorandum from Nancy Rader to CalWEA Members, Why We Supported SB 1078 (the Renewable Portfolio Standard), (Sept. 13, 2002) (on file with author). Independent Energy Producers (IEP), for example, advocated for a "simple" approach with no cost cap protection for utilities. Id. at 3–4. Facing the political reality that the utilities would prevent such an RPS from succeeding in the legislature, The Utility Reform Network (TURN) and California Wind Energy Association (CalWEA) compromised on this point to ensure the survival of SB 1078. Id.

Charge monies designated to "foster the development of in-state renewable electricity generation technology facilities... including supplemental energy payments under the California Renewables Portfolio Standard Program." Essentially, SB 1038 increased the funds collected through the Public Goods Charge from 30 percent to 51.5 percent, now providing up to $278 million to offset RPS above-market costs.

IV. ISSUES OF IMPLEMENTATION: SETTING THE BENCHMARK, AVOIDING CONFLICT WITH PURPA, AND ENSURING ENFORCEMENT

Implementation of California's RPS promises to be rife with intense debate over a host of crucial issues, many of which are of a prospective nature and beyond the scope of this Comment. This section will focus on three issues that may have immediate and practical consequences. Two issues—benchmark pricing and potential violation of PURPA by a California RPS—have already proven to be controversial. A third issue, rigorous enforcement, is also a potentially controversial subject linked directly to the success of California's RPS.

A. Setting The Benchmark: A Promise Of Controversy

Understanding SB 1078's benchmark is essential because of the pivotal role it plays in relation to PURPA. The benchmark facilitates the creation of contracts for the purchase of renewables under the RPS framework by approximating the market's valuation of renewable as compared to non-renewable energy. While benchmark pricing is not a standard element of generic RPS policy, its previous use in AB 57, and its political necessity, compelled its incorporation into California's RPS. Now the CPUC, the utilities, and renewable advocates have to hash out the details of the benchmark pricing structure, which will likely require some compromise. The benchmark promises to be one of the most crucial

79. *Id.* at Legislative Counsel's Digest (5); see supra Part II(A), discussion about Public Goods Charge.

80. SB 1038 § 15 (amending CAL. PUB. UTIL. CODE § 383.5(d)(1)). A $278 million (51.5% of the $540 million fund) is available to programs such as California's RPS. *See id.*

81. For example, the creation of a renewable credit trading system could trigger the Dormant Commerce Clause of the U.S. Constitution if it is not designed carefully. While the REC trading system was removed from the original iteration of the RPS bill, *see supra* note 68 and accompanying text, SB 1078 does not explicitly preclude the CPUC from implementing such a system, and the CPUC is considering whether such a system should be created. For an excellent analysis about the potential conflict between California's RPS and the Dormant Commerce Clause, see Kirsten H. Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 ECOLOGY L.Q. 243, 270 (1999). A second issue not covered in this note is the exemption provided to retail sellers that are not creditworthy. *See supra* notes 73, 75 and accompanying text.

82. *See supra* notes 32, 77 and accompanying text.
and controversial elements of the RPS. It raises significant financial concerns for the utilities, directly affects the amount of Public Goods Charge money necessary to cover "above-market" costs, and may flirt with lines drawn by PURPA. 83

Advocates and opponents of the RPS drastically diverge in their views about how to set the benchmark prices. SB 1078 states clearly that utilities are exempted from the renewable purchase mandate if Public Goods Charge funds cannot cover above-market costs. 84 If the RPS demands exhaust these funds, the RPS obligation extends only to renewable energy products that are at or below the benchmark price. Advocates for a strong RPS are therefore concerned that a benchmark set too low will inhibit fulfillment of the RPS mandate by the utilities, because Public Goods Charge funding may be insufficient to cover the necessary above-market cost payments. 85 They argue that the benchmark must be high enough to adequately reflect long-term market prices to capture the benefits of renewable generation and to properly represent the value of comparable alternatives that provide similar benefits. 86 Conversely, retail sellers advocate a low benchmark reflecting short-term forward prices (price points that estimate the future market value of an energy product), which would keep energy procurement costs low.87 The utilities and renewable energy advocates have already squared off over benchmark pricing. 88


84. See supra note 77 and accompanying text. While the Renewable Trust Fund currently has a value of around $540 million, $278 million of which is available to programs such as the RPS, see supra note 80, a major question mark remains whether the fund is sustainable for the life of the RPS. Much will turn on how benchmark pricing is determined and whether the RPS and other renewable energy policies are successful at giving renewable energy generation a sufficient advantage to become price competitive in the energy market. If renewables prove uncompetitive, and the benchmark is set too low, that $278 million could be quickly drawn down, incapacitating RPS implementation.


86. See id.

87. See infra note 89 and accompanying text.

88. Recent CPUC rulemaking to implement the AB 57 renewable procurement mandate provides evidence that the utilities, particularly Southern California Edison, are prepared to fight over the establishment of the benchmark. Southern California Edison Company's (U 338-E) Application For Partial Rehearing of Decision 02-08-07, Policies & Cost Recovery Mechanism for Generation Procurement & Renewable Res. Dev., Cal. Pub. Utils. Comm'n Rulemaking No. 01-10-024. In this action, SCE contested the CPUC's provisional benchmark
Battle lines have been drawn over the mechanism by which the benchmark is established. Southern California Edison (Edison) and San Diego Gas and Electric (SDG&E) have insisted on using forward pricing to approximate market rates. Renewable energy advocates such as The Utility Reform Network (TURN) believe that forward pricing fails to provide a realistic comparison for establishing long-term contracts with new power generators, and will result in unrealistically low benchmark prices. Alternatively, renewable advocates assert that benchmarks should be based on the actual costs of new power generation. Because of the degree to which renewable advocates and utilities differ on this issue, it is clear that setting the benchmark prices will be controversial, threatening to delay RPS implementation and forcing the parties to incur high costs to argue their respective positions to the CPUC.

B. Some Good News: California Can Avoid PURPA This Time

Given California's recent history of conflict with FERC, an inquiry into the viability of California's RPS must address potential conflicts with federal law, including PURPA. In recent rulemaking proceedings to implement AB 57, California's precursor to its RPS, Southern California price of 5.37 cents/kWh. See Decision 02-080-071 at 34-35, Policies & Cost Recovery Mechanism for Generation Procurement & Renewable Res. Dev., Cal. Pub. Utils. Comm'n Rulemaking No. 01-10-024. This benchmark, viewed kindly by renewable advocates, was set as a "reasonableness" cost cap for the interim procurement of renewable energy, used to determine whether interim renewable energy purchases would be per se reasonable. Id.


91. Opening Brief of The Utility Reform Network at 32, Policies & Cost Recovery Mechanism for Generation Procurement & Renewable Res. Dev., Cal. Pub. Utils. Comm'n Rulemaking No. 01-10-024. Based on TURN witness Marcus' calculations, reasonable benchmarks based on comparable newly emerging generation costs should be in the range of 5-6 cents/kWh. Id. Arriving at a benchmark based on the cost of new generation may also be difficult because of the differing assumptions used by the parties to calculate their versions. For example, utilities could assume that new generation units are super-efficient with unrealistically low operating costs, long depreciation periods, and small equity returns- creating an artificially low benchmark. The battle over these assumptions will be crucial in the battle over the benchmark.


93. Advocates used a two-pronged approach in promoting the RPS policy. While pushing the RPS legislatively, Renewable Energy Advocates, The Utility Reform Network, California Wind Energy Association, Center for Energy Efficiency and Renewable Technology, and
Edison raised the very same PURPA issue that plagued the BRPU.\textsuperscript{94} Edison claimed that the pricing proposals of renewable energy advocates, identical to the system adopted by the legislature in the RPS, would violate PURPA's prohibition on requiring utilities to purchase renewable energy above avoided costs.\textsuperscript{95}

Edison depicted the renewable procurement process as a mechanism that actually mandates the price to be paid by wholesale purchasers, violating PURPA's avoided-cost provision by forcing power purchasers to buy renewables above normal market prices.\textsuperscript{96} In support of this contention, Edison invoked Midwest Power Systems, Inc., a 1997 FERC ruling which found that the Iowa Utilities Board's implementation of Iowa's alternative energy production statute violated PURPA because it ordered Midwest Power to purchase power from QFs at a rate exceeding avoided costs.\textsuperscript{97} This comparison, however, is severely flawed.

In Midwest Power Systems, Iowa violated federal law only because the Iowa Board set a specific rate above avoided costs.\textsuperscript{98} As indicated by FERC in that case, "states have broad powers under state law to direct the planning and resource decisions of utilities under their jurisdiction. States may, for example, order utilities...to purchase renewable [power] generation."\textsuperscript{99} States only violate PURPA when utilities are ordered to purchase energy at a rate set by the state that exceeds avoided cost.\textsuperscript{100} FERC made it clear that ordering utilities into long-term contracts with alternative energy facilities did not violate PURPA.

Independent Energy Producers also advocated for the adoption of RPS standards through CPUC rulemaking in case the RPS failed legislatively. In contentious administrative rulemaking proceedings, pitting RPS advocates against California's three investor-owned utilities (see supra note 63), a host of issues, including renewable energy procurement and setting an RPS benchmark, have been contested, resulting in an interim decision on many of the issues. See Decision 02-10-062, Policies & Cost Recovery Mechanism for Generation Procurement & Renewable Res. Dev., Cal. Pub. Utils. Comm'n Rulemaking No. 01-10-024 (filed October 24, 2002), available at http://www.cpuc.ca.gov/publishedfinaldecision/20249-02.htm#P97_2435.


95. Id.

96. Id.


99. Id. at 6.

100. Id.; Orange & Rockland Utils., Inc., 43 F.E.R.C. 61,067 (1988) (New York statute setting a minimum rate of 6\$/kWh for compulsory purchase from QFs was preempted by PURPA).
To conform to FERC's ruling, the Iowa Utility Board reinterpreted Iowa's set price of six cents as a "ceiling that cannot be exceeded absent good cause."101 By implementing the rate as a price cap rather than a set rate, the Board aimed to fulfill its alternative energy obligation while conforming to federal law. California's RPS avoids the PURPA problem in the same manner. As argued by TURN and other renewable advocates, the benchmark is simply a cost cap, leaving price setting to the competitive market.102

Additionally, the California RPS was designed specifically to ensure that utilities pay no more than market cost by covering above-market costs with Public Goods Charge money.103 Edison concludes in its own brief before the CPUC, "AB 57 also conforms the state's renewable policy to applicable federal law by ensuring that payments to new renewable resources are limited to the market‐based rates applicable to replacement generation, except insofar as available [Public Goods Charge] funding... permits a cost‐equalizing subsidy to renewable developers."104 SB 1078 includes the same cost‐equalizing subsidy that Edison admitted made AB 57 conform to federal law.

Although conflict with PURPA is unlikely, one easily avoidable pitfall lingers. If the RPS bidding process between a retail seller and a designated QF results in prices above the benchmark,105 and the RPS benchmark is set above the CPUC's avoided‐cost calculation pursuant to PURPA,106 utilities could argue that although rates are not being set by the CPUC Commission per se, they are still being forced to purchase from a QF above the avoided cost because of the state RPS mandate.
Such a situation is avoidable because the CPUC has the authority to determine both PURPA avoided costs and RPS benchmarks, two provisions designed to approximate the market price of equivalent non-QF and non-renewable power. By systematically equating avoided costs and benchmark pricing, or by creating a mechanism to prevent any benchmark from exceeding calculated avoided cost, the CPUC can eliminate any PURPA controversy at its outset. Even if this task appears difficult, it is essential to ensure that SB 1078 does not fall into the same trap that derailed the BRPU.

C. Enforcement: A Crucial Component

A final implementation issue—and an important lesson to learn from the Texas RPS—is that a strong penalty provision is crucial for an effective RPS. Unfortunately, by removing the original penalty provision from SB 532, the legislature left open the danger of weak enforcement, which could jeopardize the efficacy of the RPS and provide an incentive for utilities to delay meeting their procurement requirements. Renewable advocates are concerned that an RPS law without teeth will allow the utilities to delay implementation and more easily defend noncompliance through litigation.

One positive indication that the CPUC will be diligent in its enforcement obligation is its past support for robust renewable energy procurement, even prior to the passage of AB 57 or SB 1078. As of its most recent decision regarding renewable energy procurement, however, the CPUC has yet to define a penalty provision or other enforcement system under SB 1078. This will be one of the most critical issues to ensure effective implementation, which began in early 2003.

Establishing a penalty provision, however, is just a first step in ensuring compliance with the RPS. The creation of a tracking and monitoring system will also be crucial. Enforcement may be more

107. See supra note 106 & infra note 121.
108. See supra note 50 and accompanying text.
109. See supra note 69 and accompanying text (describing the removal of an explicit penalty from SB 532, the precursor to SB 1078).
113. See Decision 02-10-062, supra note 93. The Commission has only asked for public comment on the creation of a penalty provision. Id.
complicated than expected because the Energy Commission and the CPUC have discrete roles in the implementation of California's RPS. The Energy Commission certifies eligible renewable energy resources, designs and implements an accounting system to verify compliance with the RPS, and allocates and awards supplemental energy payments to cover above-market costs of renewables. Meanwhile, the CPUC oversees the creation of energy procurement plans, implements annual procurement targets for each electric utility, enforces compliance, and establishes and implements the benchmark price of electricity for contracts between electricity retailers and renewable generators. This separation of duties between the CPUC and Energy Commission is likely to require intensive cooperation between the two distinct agencies, and promises to make RPS implementation difficult. Thus, effective enforcement will depend on the structures created during implementation of SB 1078 and the continuing coordination between the Energy Commission and the CPUC.

CONCLUSION

The creation of a Renewable Portfolio Standard through passage of Senate Bill 1078 was an important step to putting California back on track to lead the country in creating a stable, competitive, sustainable energy market. Although the legislation contains a few provisions that may result in delayed compliance and contentious implementation, California's new RPS contains the fundamental commitment necessary for a successful mandate to increase renewable energy procurement through long-term purchase obligations.

Success of the RPS will hinge largely on the ability of the California Public Utility Commission to effectively implement three crucial aspects of its new renewable procurement mandate. First, creating a benchmark pricing mechanism that reflects the true costs of emerging generation is critical to ensuring that sufficient Public Goods Charge funds are available to cover any above-market costs of renewable generation. Second, the benchmark mechanism must also be carefully crafted to

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114. For a description of the general roles of these two state agencies, see supra notes 19 and 22.
116. Id. (amending CAL. PUB. UTIL. CODE § 399.13(b)).
117. Id. (amending CAL. PUB. UTIL. CODE § 399.15(a)(2)).
118. Id. (amending CAL. PUB. UTIL. CODE § 399.14(a)(3)).
119. Id. (amending CAL. PUB. UTIL. CODE § 399.15(b)).
120. Id. (amending CAL. PUB. UTIL. CODE § 399.14(d)).
121. Id. (amending CAL. PUB. UTIL. CODE § 399.15(c)). The market price is commonly referred to as the "benchmark."
avoid entanglement with the federal Public Utility Regulatory Policy Act’s avoided-cost provision. Lastly, a concrete enforcement mechanism is essential to ensure timely compliance.

By following the legislature’s strong commitment to create an effective renewable energy industry in California, the CPUC can ensure that the state will remain at the forefront of efforts to establish a sound national energy policy. Given the chaotic international political climate of today, and the growing acknowledgement that global climate change is a real environmental threat, a policy directing the United States away from fossil fuel dependency has never been timelier.