

New Jersey Law Journal

VOL. CXCVII - NO.5 - INDEX 438

AUGUST 3, 2009

ESTABLISHED 1878

IN PRACTICE

ENVIRONMENTAL LAW

Harnessing the Power of the Sun

The creation of a sustainable solar energy market has been a complicated process

BY NICOLE DORY

The sun is the source of a significant amount of clean, electric energy, yet solar energy remains underutilized due, in part, to high costs and an ineffective private market. Indeed, solar energy is one of the most expensive sources of renewable energy because capital costs are often prohibitive. As a result, New Jersey is at the forefront of legislative initiatives aimed at reducing some impediments and encouraging the use of solar energy. Although the importance of solar and renewable energy was recognized by our Legislature almost a decade ago, the development of rules to create a sustainable market has been a lengthy and complicated process. Current legislation promises to expand the solar market by mandating the use of solar energy and implementing tax and economic incentives to offset installation costs. However, as this market continues to develop, more legislation is required to stimulate additional investments

Dory is an associate with the business litigation and real estate law and land-use practice groups of Connell Foley in Roseland.

in the renewable energy market.

New Jersey's Renewable Portfolio Standard

On February 9, 1999, New Jersey took the first step in creating a solar market by enacting the Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49 et seq. The act requires that electric utilities disclose the environmental benefits of the energy they produce and directs the Board of Public Utilities ("BPU") to establish what is now known as the State's Renewable Portfolio Standard ("RPS") — a standard that requires increased production of renewable energy. See N.J.A.C. 14:8-1 et seq. The next big boost to the solar market occurred through the BPU's adoption of the Renewable Energy and Energy Efficiency Rules, N.J.A.C. 14:8-1 et seq., which have been amended to implement the policy goals of the act. As a result, the RPS is one of the most aggressive standards in the nation and should jump start the solar market in New Jersey.

One important aspect of the RPS is that it mandates that electric utilities demonstrate use of solar and renewable energy. The RPS does this by establishing a graduated schedule of annual percentages of solar and renewable energy that must make up the electricity sold by utilities. N.J.A.C. 14:8-2.3. The percentages increase annually and the schedule ends in 2021 with 2.12 percent of electricity derived from solar energy and 17.88 percent derived from Class I renewable

energy. To comply with the RPS electric utilities can demonstrate use of solar and renewable energy by purchasing Renewable Energy Certificates ("RECs") and Solar Renewable Energy Certificates ("SRECs"). These are tradable certificates that represent the "environmental benefits" of electricity generated from renewable and solar energy and each certificate represents 1 megawatt-hour of electric generation. N.J.A.C. 14:8-2.2. Currently, the certificates can be sold by anyone who operates a solar system that is connected to the grid and passes an inspection by the Clean Energy Program. Additionally, the rules require that electric utilities comply with the RPS by either purchasing these certificates or by making Alternative Compliance Payments ("ACP") in lieu of RECs or Solar Alternative Compliance Payments ("SACP") in lieu of SRECs. N.J.A.C. 14:8-2.2. Requiring electric utilities to either purchase certificates or make payments to comply with the RPS creates a market for RECs and SRECs.

The graduated schedule in the RPS also includes separate levels of electricity generated from solar systems (represented by SRECs) and "Class I" and "Class II" renewable energy sources (represented by Class I and Class II RECs). Class I RECs represent energy generated from certain renewable sources, including the sun, wind and geothermal systems, while Class II RECs represent energy produced from resource recovery or hydro-power facilities. N.J.A.C. 14:8-1.2. Thus, the RPS allows solar energy to be sold as SRECs or Class I RECs; this allows utilities to use solar energy to meet

two different requirements in the RPS and creates additional demand for solar energy. Furthermore, the annual increases in SRECs and Class I RECs insure that the solar market will continue to grow and should encourage the installation of solar systems as utilities seek to comply with the RPS.

The Compliance and Voluntary Markets

In addition to the mandatory requirements for utilities to purchase SRECs and RECs in the so-called "compliance" market, the rules also permit the sale of these certificates to buyers interested in purchasing solar power, but who are not required to comply with the RPS (e.g. non-electric utilities, companies or individuals). Buyers not bound by the requirements of RPS are far less regulated in the so-called "voluntary" market. For example, the regulations establishing timing restrictions for the purchase of these certificates to utilities are not applicable to the voluntary market. See, e.g., N.J.A.C. 14:8-2.3 to 12.

Valuation of SRECs

The rules affect the price of these certificates in several respects. First, because the price is market-based, it fluctuates with supply and demand. Furthermore, if utilities do not purchase enough certificates within a specified time period, they must make alternative payments (ACPs or SACPs). Effective March 16, the rules include a graduated schedule for the price of SACPs. See N.J.A.C. 4:8-2.10. Therefore, the annual price of SACPs effectively becomes the upper limit of the price of SRECs in the compliance market. However, in the voluntary market, where purchasers are not required to comply with the RPS, the price of SRECs should not be heavily influenced by the price of SACPs or the timing restrictions applicable to the compliance market. Accordingly, the purchase price of these certificates is affected by the market and their use by the ultimate purchaser.

Trading of SRECs

The New Jersey SREC Program has established an arena for trading SRECs on the Solar Renewable Energy Certificate

Web site. The Web site provides a forum for SRECs to be created and verified, and then facilitates their sale using an Internet-based account. Sellers and purchasers can easily establish an account on the Web site using forms available online. Once SRECs are verified, the SREC program administrator will then connect the facility to an account and SRECs will accrue in the account. In addition, available SRECs may also be advertised through an electronic bulletin board on the Web site. Finally, once a contract for the sale of SRECs has been negotiated and executed, sellers can use the Web site to transfer SRECs to the purchaser.

Financing Programs

In response to orders issued by the BPU in 2008 and 2009, several utilities now offer programs to finance new solar projects. The BPU has approved financing programs by PSE&G, JCP&L and Atlantic City Electric and is considering a program by Rockland Electric Company. These programs provide much needed financing for the installation of solar systems and allow systems owners to repay loans by entering into long-term purchase and sale agreements for SRECs with utilities. The SRECs can then be auctioned off to other utilities to comply with the RPS. These programs should encourage banks and developers to consider the value of SRECs and offer financing for the installation of new systems in the future.

Legislation

In addition to establishing the RPS, other legislation will help the solar market expand and achieve the goals established by the State's Energy Master Plan and Global Warming Response Plan. For example, state and federal tax benefits and exemptions now exist for solar systems. See e.g., 26 U.S.C. 168(e)(3) (B); N.J.S.A. 54:32B-8.33 and N.J.S.A. 54:4-3.113b. These laws allow owners to depreciate the cost of these systems and exempt them from state sales and property taxes. Furthermore, municipalities are now required to include renewable

energy systems in their master plans and solar facilities are a permitted use in industrial zones with 20 or more acres. See N.J.S.A. 40:55D-28; N.J.S.A. 40:55D-66.11. These laws should encourage municipalities to consider the solar systems in their land-use scheme and make municipal approvals for them less complicated. Additionally, to encourage the installation of solar systems in the residential market, the Residential Development Solar Energy Systems Act, N.J.S.A. 52:27D-141.1 et seq., was recently enacted to require developers to offer solar energy systems on new construction, which should encourage homeowners to install solar systems.

However, the need for additional legislation continues because certain issues still impede the widespread use of solar energy. For example, zoning and building codes are lagging behind the budding renewable energy market because most do not even recognize these systems in their codes. Accordingly, solar systems are considered a structure and owners are required to comply with bulk and height requirements and obtain use variances prior to installation. New Jersey Assembly Bill No. 3062 would solve part of this problem by defining solar installations as "inherently beneficial" in the land-use law, thereby reducing the burden of proof required to obtain a variance. Additionally, *Senate Bill No. 2353* would establish a Solar Roof Installation Warranty Program so that roof warranties are not voided through the installation of solar systems. Because roof warranties may be voided when solar systems are installed, owners are hesitant to install these systems. Finally, *Assembly Bill No. 2859* would permit solar energy systems on preserved farms. If passed, this bill will encourage farmers to join the solar market. These are just a few of the examples of proposed legislation that will remove the impediments to the solar market. The need for new legislation will become evident as the solar market continues to grow and the speed by which these laws are enacted will affect not only our environment through the use of solar energy, but also the economy of our state as the demand for SRECs increases. ■