STATE OF VERMONT
PUBLIC SERVICE BOARD

May 27, 2009

STAFF REPORT AND RECOMMENDATION
RE: IMPLEMENTATION OF THE VERMONT VOLUNTARY RENEWABLE SET-ASIDE PROGRAM FOR THE REGIONAL GREENHOUSE GAS INITIATIVE

I. INTRODUCTION

The Regional Greenhouse Gas Initiative ("RGGI") is a cooperative effort by ten Northeastern and Mid-Atlantic states, including Vermont, to reduce carbon dioxide ("CO_2") emissions – a greenhouse gas that contributes to global climate change. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The Public Service Board ("Board") has been directed by statute, 30 V.S.A. § 255, to implement the auction provisions of the RGGI program.

In participating in the RGGI auction, Vermont must determine the extent to which CO_2 allowances should be retired to reflect the participation in voluntary renewable programs. After conducting a workshop, Board staff have developed this Report and Recommendation that describes a proposed framework for retiring CO_2 allowances in proportion to participation in voluntary renewable programs.

II. BACKGROUND

On July 18, 2008, the Board issued an order implementing a process to participate in the RGGI auctions. The July 18 Order further directed Board staff to hold a workshop to discuss details relating to the set-aside and retirement of allowances in proportion to participation in voluntary renewable programs.

On April 2, 2009, Board staff held a workshop to discuss the voluntary renewable set-aside program. Board staff agreed to provide a report and recommendation to the Board, and that workshop participants would have the opportunity to comment on staff's report, with the Board to issue a final order based upon the report and participants' comments.

III. Overview of A Set-Aside Program

A set-aside program would allow for the retirement of RGGI allowances in an amount that reflects the offsetting effects on CO_2 emissions associated with voluntary renewable purchases. The underlying purpose of a set-aside program is to allow providers of voluntary renewable pricing programs to continue to claim that participation in such programs results in CO_2 reductions. The ability to make the claim of CO_2 reductions will potentially lead to greater demand for these programs, and thus an increase in electricity generated from renewable energy.

The Trustee would retire CO_2 allowances in the set-aside account, in an amount approved by the Board, up to the number of tons requested by authorized applicants in order to reflect the purchase and retirement of renewable energy credits ("RECs") made by applicants during a given compliance year. Any CO_2 allowances not utilized for the voluntary renewable purchase set-aside program would be released to auction.

IV. Discussion

Board staff recommend that the Board implement a set-aside program for voluntary renewable purchases in the following manner.

Board Staff Recommendations for Eligibility Criteria:

Board staff propose that eligibility for set-aside for voluntary renewable purchases be consistent with authority established for renewable pricing programs under 30 V.S.A. § 8002(1) and the definition of renewable energy under 30 V.S.A. § 8002(2). Consistency among requirements will allow for Vermont utilities offering renewable pricing programs to be eligible to participate in the set-aside program and continue to claim that participation in such programs results in CO_2 reductions.

There are currently two voluntary renewable pricing programs administered by Vermont electric distribution utilities: Central Vermont Public Service Corporation's ("CVPS") "Cow

Power" program, and Green Mountain Power Corporation's ("GMP") "Greener GMP" program.[1] In addition, 30 V.S.A. § 8003 requires all Vermont electric distribution utilities to establish voluntary renewable programs or provide customers the opportunity to donate money to the Clean Energy Development Fund ("CEDF"). Customers enrolled in these voluntary renewable pricing programs pay a premium on their electric rates to support renewable energy.

Section 8002(2) defines the types of renewable energy resources that are eligible for Vermont's voluntary renewable pricing program. Under § 8002(2), renewable energy is defined as "energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate." The definition includes energy derived from methane gas produced by sewage treatment plant wastes, landfill wastes, and anaerobic digestion of agricultural products, byproducts, or wastes. In addition, hydroelectric facilities with a generating capacity of 200 megawatts or less are also defined as renewable in the statute.

Board staff propose the use of the definition of renewable energy in § 8002(2) to define the energy resources eligible for the set-aside program. In addition, given that the allowances are being retired from the RGGI cap, Board staff propose that renewable energy generation projects would have to be located in a RGGI-participating state to be eligible for the set-aside program.

In addition, Board staff recommend that the set-aside for voluntary renewable programs be available to programs offered by Vermont electric utilities and other qualifying entities that purchase and retire RECs on behalf of Vermont customers. Utility-sponsored programs are subject to regulatory oversight, with the utilities required to submit a tariff that is reviewed by the Board and the Department of Public Service before it goes into effect. Board staff believe that a non-utility entity should also be eligible for the set-aside program, if the Board establishes participation requirements for the non-utility entity that are consistent with the requirements for a utility who offers a voluntary renewable pricing program.

Under the existing utility voluntary renewable pricing programs, customers are afforded the opportunity to voluntarily purchase renewable service. This service involves the purchase

---

1. The Board's Orders approving these programs are: Docket 6933, Order of 7/30/04, at 34 (approving implementation of CVPS's "Cow Power" program); Docket 7043, Order of 10/27/05, at 16 (GMP's Renewable Energy Rider and Voluntary Renewable Support Rider).

and retirement of tradeable RECs on the participating customer's behalf consistent with the requirements established in § 8002(1)(A)(i). Specifically, the tariffs for CVPS's "Cow Power" program and GMP's "Greener GMP" program identify a qualifying renewable energy resource as an electrical generating facility that: (1) has received a Statement of Qualification from the Massachusetts Division of Energy Resources certifying that the generating facility meets the requirements of eligibility as a New Renewable Generation Unit, or (2) has been approved by the Connecticut Department of Public Utility Control as a qualified Class I Renewable Portfolio Standards Generator.

Board staff recommend that a non-utility entity be given the opportunity to participate in the set-aside program conditioned on the demonstration that its service provides the purchase and retirement of RECs on the participating customer's behalf consistent with the requirements of § 8002(1)(A)(i) and the definition of renewable energy resources set out in § 8002(2). As recognized in existing utility tariffs for green pricing programs, the purchase and retirement of qualified Connecticut or Massachusetts RECs would satisfy the requirements for renewable energy resources set out in § 8002(2). For RECs other than a qualified Connecticut or Massachusetts RECs, Board staff recommend that the non-utility entity be allowed to demonstrate that the retired RECs meet the definition of a "new renewable energy" resource under § 8002(4) to be eligible for the set-aside program. ("New renewable energy" is defined under § 8002(4) as renewable energy produced by a resource coming into service after December 31, 2004.)

A non-utility entity may also serve customers outside of Vermont. Given that the allowances directed for retirement are from the Vermont portion of the RGGI cap, Board staff believes that the set-aside program should be reserved for Vermont customers only. Therefore, Board staff recommend that a non-utility entity be eligible for the set-side for voluntary renewable programs only to the extent that it can demonstrate that it is purchasing and retiring RECs on behalf of a Vermont participating customer.

The renewable energy pricing program, under § 8003, allows for contributions to the CEDF to address high prices or supply shortfalls affecting a utility's ability to acquire and retire RECs on behalf of participating customers. The statute also allows distribution utilities the option to participate solely in the CEDF as its voluntary renewable pricing program. Board staff recommend that the set-aside for voluntary renewable programs not include any portion of the contribution, directed to the CEDF, nor include Vermont utilities whose voluntary renewable pricing program consists solely of contributing to the CEDF. Thus, only projects actually developed and producing or displacing kwh from the utility under a green pricing program would qualify.

Board staff are concerned that applying the set-aside to CEDF projects would raise challenging issues that include burdensome administration, difficulty in verification, and the potential for double-counting. The CEDF offers a portfolio of funding opportunities to accelerate the development, commercialization, and production of clean energy. CEDF includes assistance for feasibility studies and pre-development activities that could result in the determination that the project not be constructed. Therefore, some of the CEDF is spent on projects that do not result in the production of electricity from renewable energy and thus do not result in actual CO_2 reductions. In addition, some of the CEDF is spent on projects that lead to the production of electricity, that in the future, could sell RECs that are purchased by a green pricing program, and thus retiring allowances on behalf of contributions directed to the CEDF could result in double-counting. Board staff believe the inclusion of purchases in the set-aside program corresponding only to the retirement of RECs will avoid the possibility of retiring allowances that have been double-counted or do not result in CO_2 reductions.

Although the CEDF is a valuable mechanism for developing renewable projects, the development of projects, as opposed to operation, does not necessarily result in CO_2 reductions. The intended purpose of the set-aside mechanism is to allow for the retirement of RGGI allowances in an amount that reflects the offsetting effects of CO_2 emissions associated with operational renewable electricity projects. Board staff believe that their recommendation for the inclusion of voluntary renewable purchases in the set-aside program corresponding only to the retirement of RECs is consistent with the intended purpose of the set-side mechanism.

Existing utility tariffs for voluntary renewable pricing programs establish that utilities cannot acquire "expired" RECs to meet participating customer demands. This concern for double-counting also arises if a REC retired by the set-aside program is used to meet another state's renewable portfolio standard. Therefore, Board staff recommend that the Vermont utility or qualifying entity eligible for the set-aside program demonstrate that the RECs purchased and retired for the set-aside program are not used by the generator or purchaser to meet a renewable portfolio standard.

Board Staff Recommendations for Verification Protocols:

Board staff recommend that a reporting requirement be established for utilities or other qualifying providers that have voluntary renewable pricing programs to report participation in these programs, so that requests for retirement of associated CO_2 allowances can be made to the Board.

An applicant would submit a written request to the Board to retire a specified number of CO_2 allowances in the voluntary purchase set-aside account. All requests for the retirement of allowances from the voluntary renewable energy market set-aside would be submitted by July 1, immediately following the allocation year for which they are being made. The requests would include the following information to verify and document that the voluntary renewable energy purchases demonstrates accreditable CO_2 emissions reductions or avoidance:

(1) Documentation of the number of RECs, in MWh, purchased on behalf of retail consumers, in Vermont, during the previous calendar year;

(2) Documentation that the RECs were purchased and retired by the applicant;

(3) Documentation of the calendar year when the retail purchase(s) was made;

(4) State from which the RECs were purchased, including documentation of facility name, unique generator identification number, and fuel type;

(5) Documentation that the RECs: (a) have received a Statement of Qualification from the Massachusetts Division of Energy Resources certifying that the generating facility meets the requirements of eligibility as a New Renewable Generation Unit; or (b) have been approved by the Connecticut Department of Public Utility Control as a qualified Class I Renewable Portfolio Standards Generator; or (c) are consistent with the requirement of § 8002(1)(A)(i) and meet the definition of new renewable energy resource under § 8002(4);

(6) Any additional information to demonstrate that the RECs are eligible in Vermont and not being credited in more than one participating state, and are not being credited toward any renewable portfolio standard.

Board Staff Recommendations for Calculation of CO_2 Allowances for Retirement:

Board staff propose that the total tons of CO_2 retired would be equal to the MWh purchase of voluntary renewable energy multiplied by the marginal CO_2 emissions rate for the region where the electricity represented by the sale was generated. Specifically, the total tons of CO_2 retired would be determined using the following equation:

CO_2 tons = MP × MER/2000

where:

CO_2 tons = the number of allowances (in tons rounded to the nearest whole ton) to be placed in the retirement account.

MP = the number of renewable energy credits (RECs) voluntarily purchased on behalf of Vermont consumers during the calendar year (in equivalent MWh), which have been generated within a participating RGGI state.

MER = the most recently published annual average marginal emission rate (in lbs of CO_2 per MWh)[2] as reported by the corresponding participating state's regional transmission organization.

After review of applicant requests and providing for Advisory Committee input, following the July 1st application deadline, the Board would direct the RGGI Trustee to retire the number of CO_2 allowances equal to the amount of avoided CO_2 emissions from the previous calendar year, as determined by the equation above.

2. For ISO New England, the 2005 annual average marginal emission rate is 1,107 lbs/MWh as reported in *2005 New England Marginal Emission Rate Analysis*, ISO NE, July 2007.

Board Staff Recommendations for Set-Aside Program Cap

The July 18 Order set the cap on the set-aside program at one percent (or 12,258 tons per year or about 22,146 MWh); any increase in the cap would be made only after requesting comments on this issue.

It is the understanding of Board staff that the one percent set-aside should be sufficient for Vermont's existing voluntary renewable programs. If the required allowances approach the one percent cap, the Board could revisit this issue.

V. Conclusion

In summary, staff recommend that the Board implement the set-aside program for voluntary renewable purchases described above and issue an order consistent with this Report and Recommendation.