STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7533

Investigation Re: Establishment of a Standard Offer)
Program for Qualifying Sustainably Priced Energy)
Enterprise Development ("SPEED") Resources)

Order entered: 10/28/2009

SECOND ORDER RE IMPLEMENTATION ISSUES

I. INTRODUCTION

On September 30, 2009, the Public Service Board ("Board") issued an Order establishing a standard-offer program for qualifying sustainably priced energy enterprise development ("SPEED") resources pursuant to the Vermont Energy Act of 2009 ("Act 45")[1]. On October 16, 2009, the Board issued an Order addressing certain implementation issues,

Given that the standard-offer program is both new and complex, participants and Board staff continue to identify implementation issues that need to be resolved. In this Order, we resolve issues that have arisen since the October 16 Order and rule on a motion to alter the September 30 Order. Finally, we clarify a decision made in our October 16 Order.

II. BACKGROUND

On October 15, 2009, Blue Heron Hydro LLC ("Blue Heron") filed a motion to alter the September 30 Order regarding the definition of site control as it relates to hydroelectric facilities. On October 16, 2009, Board staff issued an e-mail setting a deadline for comments on Blue Heron's motion. The e-mail also solicited comments on a separate issue that had been identified: the definition of an agricultural methane facility.

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1. Public Act No. 45 (2009 Vt., Bien. Sess.).

Comments were submitted by the Vermont Agency of Agriculture, Food and Markets ("AAFM"), Carbon Harvest Energy, LLC ("Carbon Harvest"), PurposeEnergy, Inc. ("PurposeEnergy"), and Central Vermont Public Service Corporation ("CVPS").

III. IMPLEMENTATION ISSUES

Definition of Site Control for Hydroelectric Projects

The standard-offer contract, as adopted in the September 30 Order, requires that applicants demonstrate control over the site of the proposed project and defines site control as follows:

> Site Control means proof of dominion over real property to the extent necessary to construct the Project in accordance with the description set forth on Attachment A. Site control may be established by: (1) fee simple title to the property; (2) a valid written leasehold interest in the property for at least the duration of the contract term; (3) a valid written option, unconditionally exercisable by Producer, to purchase or lease such real property; or (4) a duly executed contract for the purchase or lease of such property.

Blue Heron requests that the definition be modified such that, for hydroelectric facilities, the definition of site control would include holding a Federal Energy Regulatory Commission ("FERC") preliminary permit. Blue Heron suggests that the Board "could receive regular updates (that FERC requires) to show that the applicant is moving forward through the FERC licensing or exemption process."

No other participant filed comments on this issue.

Hydroelectric projects proposed for navigable waterways must receive a FERC license before the facility can be constructed.[2] As it is not possible for developers to demonstrate ownership of the navigable waterway, FERC has created a process under which a developer can obtain a preliminary permit that establishes a priority of right to apply for a license at a specific location.

The purpose of the site-control requirement is to decrease speculative positioning in the queue by showing that the applicant has identified a particular location on which the project

2. 16 U.S.C. § 791 *et seq*.

could be constructed, provided the developer receives the necessary permits. It was not intended to bar an entire class of facilities that could not meet the site-control requirement. For these purposes, the FERC preliminary permit is sufficiently analogous to the definition of site control contained in the standard contract.

FERC describes a preliminary permit as follows:

> A preliminary permit, issued for up to three years, does not authorize construction; rather, it maintains priority of application for license (i.e., guaranteed first-to-file status) while the permittee studies the site and prepares to apply for a license. The permittee must submit periodic reports on the status of its studies. It is not necessary to obtain a permit in order to apply for or receive a license.[3]

We conclude that aligning the standard-offer requirements for hydroelectric projects with the FERC licensing process, to the extent feasible, is appropriate. Accordingly, possession of a FERC preliminary permit provides sufficient showing of site control for hydroelectric facilities and we modify the definition of site control accordingly.

Classification of Agricultural Methane Projects

Act 45 distinguishes between plants that utilize "methane derived from an agricultural operation"[4] and plants that utilize biomass. Board staff issued an e-mail requesting comments on how the Board should distinguish agricultural-methane projects from other biomass projects. In particular, the e-mail requested comments on whether agricultural-methane projects must utilize only feedstock that originates on a farm, whether a minimum percentage of the feedstock should be derived from agricultural operations, whether a farm-based project that utilizes feedstock grown solely for that purpose qualifies as an agricultural-methane project, and whether a plant must be physically located on a farm to be classified as an agricultural-methane project.

Participants' Comments

AAFM contends that:

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3. http://www.ferc.gov/industries/hydropower/gen-info/licensing/pre-permits.asp.

4. *See* Sections 8005(b)(2)(A)(I) and 8005(g)(3).

> Any system that is located on a farm and is digesting agricultural products, byproducts and wastes principally from the farm is considered a farm system by the VAAFM and should be considered agricultural operations for the purpose of this program. Principally is considered to be 51% of the feedstock that needs to come from the farm.

AAFM states that the standard-offer price calculated for agricultural-methane projects includes the assumption that off-farm feedstocks would be utilized by the project. AAFM further states that the definition of "farming" contained in 10 V.S.A. § 6001(22) provides guidance in defining an agricultural operation, and pursuant to that statutory definition, to qualify as an agricultural-methane project a digester must be located on a farm and 51% of the feedstock has to come from the farm.

AAFM suggests that annual accounting of the type of feedstock utilized by the digester, combined with record-keeping requirements regarding the amount of off-farm feedstock used, is a sufficient compliance mechanism to ensure that at least 51% of the feedstock is derived from on-site agricultural operations. In addition, AAFM suggests that the Board consider imposing a condition, as part of the Section 248 permitting process, that agricultural-methane projects file a nutrient-management plan for all feedstock. AAFM also states that algae used as a feedstock would be considered agricultural if the algae is grown in a hydroponic system, which could be considered a greenhouse under the definition of farming contained in Section 6001(22)(c).

Finally, AAFM states that it would not object to a non-farm facility being considered agricultural if at least 51% of the feedstock for the plant comes from the facility.

CVPS filed a letter stating that it supports AAFM's comments but suggests that "the definition of a Farm Methane Plant be flexible enough to include the possibility of a community/cooperative digester-generator that principally utilizes farm waste as its feedstock at a central location, but that may not be located on lands owned by a farmer."

Carbon Harvest filed a letter stating that it "supports the view that determination of Farm Methane categorization be based on feedstock source and recommends that projects receiving greater than 50% of total annual feedstock from farm sources be classified as Farm Methane projects."

PurposeEnergy recommends that the "origination of the feedstock should not be considered in the designation of a Plant as a methane system." PurposeEnergy states that the

standard-offer price is based on the economic analysis of the generation technology and the economics of a methane digester are independent of feedstock. In addition, PurposeEnergy states that pretreatment of feedstock provides a public benefit. PurposeEnergy further states that biomass economic models are not applicable to methane digesters and using the price for biomass "would not follow the statute stating that the price should be based on an economic analysis for each category." Finally, PurposeEnergy notes that industries such as beer brewing, cheese, and ice-cream industries are important to Vermont and should receive equal treatment to the agricultural industry.

Discussion and Conclusions

Our determination of what constitutes an agricultural methane project must be based on the language of the statute. Act 45, as quoted above, established a separate category for projects fueled by methane derived from agricultural operations. This is not a technology-based category; it does not address the type of technology that would be fueled by methane derived from agricultural operations, although the agricultural-methane projects that the Board has reviewed to date have all been anaerobic digesters, and the standard-offer price for that resource category assumed the use of anaerobic digesters. However, simply because a plant uses anaerobic-digester technology does not mean that it should be placed in the agricultural-methane resource category; a facility qualifies for this category only if it meets the requirement set forth in Act 45 that the plant utilize methane derived from agricultural operations.

Agriculture is defined as "the science, art, and business of cultivating soil, producing crops, and raising livestock; farming."[5] In addition, the definition of farming in 10 V.S.A. § 6001(22) includes "the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm."

As AAFM notes, several of the agricultural-methane projects currently in existence use feedstock from non-farm sources and the use of such non-farm feedstocks provides benefits to both the generation owner and the sources that provide the alternative feedstock. AAFM recommends that the Board define an agricultural-methane plant as a facility that utilizes at least

5. The American Heritage College Dictionary, 4th Edition.

51% of the feedstock from the farm. Carbon Harvest recommends that greater than 50% of the feedstock for the plant be derived from agricultural operations. We recognize that the practice of using non-agricultural feedstock provides significant benefit and that to entirely exclude the use of such feedstocks would limit the flexibility of agricultural-methane projects. We accept AAFM's recommendation that at least 51% of the feedstock for an agricultural-methane project must be derived from agricultural operations. There is no requirement in Act 45 that an agricultural-methane system must be located on a farm; and it is possible that a centrally located digester could be located on a non-farm site, but that more than 51% of the feedstock could be derived from agricultural operations.

We do not accept AAFM's recommendation that feedstock sources grown solely for use as a feedstock constitute agricultural operations. For example, algae grown as a feedstock for an anaerobic digester would not have any connection to agricultural operations, other than the fact that it may be grown on a farm, unless the algae is an agricultural product or waste. In such an example, the algae is not being grown for agricultural purposes, but instead to provide a fuel source for generation. Accordingly, it cannot be considered an agricultural product or waste.

We recognize that the standard-offer price for biomass may not reflect the use of technologies such as anaerobic digesters. However, the standard-offer price for agricultural methane also does not reflect a non-agricultural anaerobic digester system. In particular, the price we established for agricultural methane utilized assumptions specific to farms, such as tax rates[6] and debt terms.[7] Although the technology for an anaerobic digester may be the same for farms that utilize agricultural byproducts as feedstock and industries that utilize waste byproducts as feedstock, the price for agricultural-methane projects was determined based upon the assumption that the developers of these projects would be farms. Thus, it does not reflect costs and revenues that would be appropriately included in non-agricultural operations. The process for establishing standard-offer prices was open to any interested participant, and no participant raised the issue of whether all anaerobic digesters should receive the same standard-offer price,

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6. *See,* Docket 7523, Order of 9/15/09 at 29.

7. *Id*., at 33.

regardless of feedstock, or made a case for anything other than the default price for the biomass category.

For these reasons, we conclude that the agricultural-methane category is available only for projects that utilize methane derived from agricultural operations. Any facility that generates methane from the use of a biomass feedstock not principally derived from agricultural or landfill[8] operations will be placed in the biomass category.

Price for Solar Projects

The October 16 e-mail issued by staff requested comments on whether non-photovoltaic solar projects should be allowed into the queue, given that the price for solar technology was based solely on photovoltaic technology.

No participant provided comments on this issue.

Act 45 creates a category of solar projects without specifying photovoltaic technology. Given that a non-photovoltaic solar technology is a solar technology, it is eligible for that standard-offer price.

Wood Biomass Resources

Section 8005(j) states:

> Wood biomass resources that would otherwise constitute qualifying SPEED resources may receive a standard offer under subdivision (b)(2) of this section only if they have a design system efficiency (the sum of full load design thermal output and electric output divided by the heat input) of at least 50 percent.

The statute does not delineate how and when this showing would be made. In order to effectuate this statutory requirement, we are imposing the following procedural requirements.

First, applicants proposing wood biomass plants must submit a letter to the SPEED Facilitator, at the same time that proof of site control is submitted, affirming that the applicant is proposing a wood biomass plant with a design efficiency (the sum of full load design thermal

8. Under Act 45, projects fueled by methane derived from landfill gas is a separate category from both the biomass and agricultural-methane categories.

output and electric output divided by the heat input) of at least 50%. This will demonstrate that the applicant is aware of the statutory requirement.

Second, when submitting a petition under Section 248 to construct the generation facility, the applicants that have accepted the standard offer must provide certification from a Professional Engineer that the facility has a design efficiency (the sum of full load design thermal output and electric output divided by the heat input) of at least 50%. This will demonstrate that the project being constructed will be eligible for the standard-offer prices.[9] If an applicant cannot meet this requirement, it will be removed from the standard-offer queue.

SO ORDERED.

Dated at Montpelier, Vermont, this 28th day of October, 2009.

s/James Volz)
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) PUBLIC SERVICE
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) BOARD
)
) OF VERMONT
s/John D. Burke)

OFFICE OF THE CLERK

FILED: October 28, 2009

ATTEST: s/Judith C. Whitney
Deputy Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.

9. Under the Section 248 process, projects that receive approval are required to be constructed in accordance with the design plans submitted with the petition, or as otherwise required by the Board.