

# Brennan Punderson, PLLC

ATTORNEYS AT LAW

Kevin T. Brennan, Esq.  
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Matthew I. Iglar  
Kathleen C. Starr

April 7, 2014

NH PUC 9 APR 14 AM 11:26

Ms. Debra A. Howland  
Executive Director and Secretary  
State of New Hampshire  
Public Utilities Commission  
21 S. Fruit St., Suite 10  
Concord, NH 03301-2429

Re: DuBois Farm, Inc.; DuBois Energy, LLC of Addison, Vermont

Dear Ms. Howland:

I have enclosed for filing an original and three copies of an application for Renewable Energy Source Eligibility being filed on behalf of DuBois Farm, Inc. and DuBois Energy, LLC of Addison, Vermont.

If you have any questions or comments with regard to the application you may contact either Bernard DuBois at the contact information provided in the application, or you may contact me.

Very truly yours,

BRENNAN PUNDERSON, PLLC

By:   
Ebenezer Punderson, Esq.

EP/cd  
Enclosures

cc: Bernard DuBois – letter only

**Reply to Middlebury Office**

Monkton P.O. Box 8, 1317 Davis Road, Monkton, Vermont 05469 Phone 802.453.8400 Fax 802.453.8411

Middlebury The Marbleworks, 99 Maple Street, Suite 10B, Middlebury, Vermont 05753 Phone 802.989.7342 Fax 802.989.7441



(2)

~~##~~ Addison  
(City)

VT  
(State)

05491  
(Zip code)

9. Latitude: 73° 17' 25.93" W Longitude: 44° 05' 18.31" N

10. The name and telephone number of the facility's operator, if different from the owner: Same

(Name)

(Telephone number)

11. The ISO-New England asset identification number, if applicable: \_\_\_\_\_ or N/A:

12. The GIS facility code, if applicable: NON33011 or N/A:

13. A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different. *See attached*

14. If Class I certification is sought for a generation facility that uses biomass, the applicant shall submit:
- (a) quarterly average NOx emission rates over the past rolling year,
  - (b) the most recent average particulate matter emission rates as required by the New Hampshire Department of Environmental Services (NHDES),
  - (c) a description of the pollution control equipment or proposed practices for compliance with such requirements,
  - (d) proof that a copy of the completed application has been filed with the NHDES, and
  - (e) conduct a stack test to verify compliance with the emission standard for particulate matter no later than 12 months prior to the end of the subject calendar quarter except as provided for in RSA 362-F:12, II.
  - (f)  N/A: Class I certification is NOT being sought for a generation facility that uses biomass.

15. If Class I certification is sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies to produce energy, the applicant shall:
- (a) demonstrate that it has made capital investments after January 1, 2006 with the successful purpose of improving the efficiency or increasing the output of renewable energy from the facility, and
  - (b) supply the historical generation baseline as defined in RSA 362-F:2, X.
  - (c)  N/A: Class I certification is NOT being sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies.

16. If Class I certification is sought for repowered Class III or Class IV sources, the applicant shall:
- (a) demonstrate that it has made new capital investments for the purpose of restoring unusable generation capacity or adding to the existing capacity, in light of the NHDES environmental permitting requirements or otherwise, and

- (b) provide documentation that eighty percent of its tax basis in the resulting plant and equipment of the eligible generation capacity, including the NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
  - (c)  N/A: Class I certification is NOT being sought for repowered Class III or Class IV sources.
- 17. If Class I certification is sought for formerly nonrenewable energy electric generation facilities, the applicant shall:
  - (a) demonstrate that it has made new capital investments for the purpose of repowering with eligible biomass technologies or methane gas and complies with the certification requirements of Puc 2505.04, if using biomass fuels, and
  - (b) provide documentation that eighty percent of its tax basis in the resulting generation unit, including NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
  - (c)  N/A: Class I certification is NOT being sought for formerly nonrenewable energy electric generation facilities.
- 18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that:
  - (a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and
  - (b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.
  - (c)  N/A: Class IV certification is NOT being sought for existing small hydroelectric facilities.
- 19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in Puc 2504.01(a)(2) a. to e. *n/a*
- 20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state.
- 21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.
- 22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility.
- 23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.
- 24. A statement as to whether the facility's output has been verified by ISO-New England.

- 25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England.
- 26. An affidavit by the owner attesting to the accuracy of the contents of the application.
- 27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.

28. This application and all future correspondence should be sent to:

Ms. Debra A. Howland  
 Executive Director and Secretary  
 State of New Hampshire  
 Public Utilities Commission  
 21 S. Fruit St, Suite 10  
 Concord, NH 03301-2429

29. Preparer's information:

Name: Bernard Dubois, duly authorized agent

Title: Shareholder, Dubois Farm, Inc; Member, Dubois Energy,

Address: (1) 2038 Rt 17E LLC

(2) \_\_\_\_\_

(3) \_\_\_\_\_

Addison (City) VT (State) 05491 (Zip code)

30. Preparer's signature: \_\_\_\_\_

13. A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different:

*Applicant operates a farm-methane electrical generating facility which uses methane gas derived from processed cow manure and other off-farm feedstock to fuel a biogas generator. The manure is processed in an on-site methane digester, and the methane gas is piped directly to the generator. The gross nameplate generation capacity is 450 kilowatts. The initial commercial operation date is November 17, 2010.*

20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state:

*A State of Vermont, Public Service Board Certificate of Public Good was issued pursuant to 30 V.S.A. Section 248 on May 13, 2010, approving the facility. A copy of the CPG is attached hereto. The Air Pollution Control Division of the Vermont Agency of Natural Resources issued a letter dated April 29, 2009 determining that an air-pollution control permit is not required, provided certain conditions are met. Applicant is in compliance with said conditions. This letter is referenced at page 9 of the Certificate of Public Good.*

21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.

*A copy of Applicant's Interconnection Agreement with Central Vermont Public Service, (nks Green Mountain Power) is attached hereto.*

22. A description of how the generation facility is connected to the regional power pool of the local electrical distribution utility:

*Applicant's facility is interconnected at 12.47 kV with Green Mountain Power's distribution system originating at the Weybridge, Vermont 81 distribution circuit.*

23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof:

*The facility has been approved by the State of Connecticut Public Utilities Regulatory Authority as a Class I renewable energy source by decision dated April 6, 2011 in Docket No. 10-12-09.*

24. A statement as to whether the facility's output has been verified by ISO-New England:

*The facility's output is not verified by ISO-New England.*

25. A description of how the facility's output is reported to the GIS if not verified by ISA-New England:

*Applicant's output is verified and reported by a third-party meter reader, Vermont Electric Company. The generation facility is not a customer-sited source because its electrical output does not displace any consumption of the end-use customer.*

26. An affidavit by the owner attesting to the accuracy of the contents of the application:

*See attached Affidavit of Bernard Dubois.*

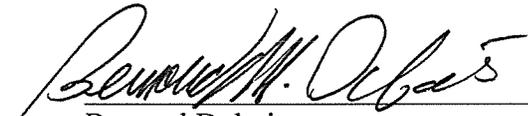
AFFIDAVIT

Dubois Farm, Inc.  
Dubois Energy, LLC

To: State of New Hampshire  
Public Utilities Commission

I, Bernard Dubois, duly authorized agent of Dubois Farm, Inc. and Dubois Energy, LLC, hereby certify that the information given in this application is true, accurate and complete to the best of my knowledge.

Dated: 4-4-, 2014

  
Bernard Dubois



State of Vermont  
Department of Environmental Conservation

Agency of Natural Resources

Air Pollution Control Division  
103 South Main Street, 3 South  
Waterbury, VT 05671-0402

Tel: 802-241-3851  
Fax: 802-241-2590

April 29, 2009

Bernard Dubois  
Dubois Farm, Inc.  
2038 VT Route 17E  
Vergennes, VT 05491

Subject: Biogas-to-Energy Project – Air Permit not Required

Dear Mr. Dubois:

The Vermont Agency of Natural Resources, Air Pollution Control Division ("Agency") received a letter from Dubois Farm, Inc. on March 11<sup>th</sup>, 2009 on behalf of the Dubois Farm located at 2038 VT Route 17E in the town of Vergennes. The letter requests approval for the installation and operation of a 500 kilowatt biogas to energy facility at the Dubois Farm. The Agency requested documentation to ensure adequate stack height, presence of a back-up flare and clean combustion technology. On April 6, 2009, the requested documentation was received from Dubois Farm, Inc. The Agency has determined that the proposed engine, back-up flare and exhaust stack configuration meet the Agency's requirements and consequently, an Air Pollution Control Permit is not required for the Facility at this time. This determination is based on the information submitted and provided the following conditions are met:

- (1) The Dubois Farm shall only install and operate a Guascor model SFGLD 360 internal combustion engine. The Dubois Farm shall not install an alternative engine without prior written approval from the Agency. The engine shall be maintained in good working order at all times and operated and maintained in accordance with the manufacturer's operation and maintenance recommendations.
- (2) The Dubois Farm shall design and operate the biogas-to-energy Facility in such a manner that any biogas which is not combusted in the engine is routed to a flare that is designed and operated in accordance with 40 *CFR* Part 60, Subpart A, §60.18. The flare shall also be equipped with a properly sized windscreen to prevent blowout of the flame. All elements of the flare system shall be maintained in good working order at all times and operated and maintained in accordance with the manufacturer's operation and maintenance recommendations.



- (3) The flare shall be equipped and operated with an automatic ignition system, such as a spark ignition system or a continuous pilot light, to ensure immediate and continuous combustion of any biogas that is routed to it. Spark igniters may be powered by the grid or an acceptable alternative power source.
- (4) The Dubois Farm shall register its air emissions with the Agency annually in accordance with Subchapter VIII of the *Vermont Air Pollution Control Regulations*. Annual registration is required for all facilities that emit more than five (5) tons of emissions annually. Your facility is estimated to exceed five (5) tons if the engine is operated for more than 1,200 hours per year.

Should The Dubois Farm alter the proposed biogas-to-energy project in any way from that presented to the Agency, such as by combusting an alternate fuel, altering the proposed engine or flare, or increasing the system capacity, the Dubois Farm shall notify the Agency prior to making such changes so that a new determination for the need for an Air Permit can be made. If you have any questions, feel free to contact me at any time.

Sincerely,



Richard Valentinetti, Director  
Air Pollution Control Division  
([Dick.Valentinetti@state.vt.us](mailto:Dick.Valentinetti@state.vt.us))

Enclosure

cc: Mike Raker, Agricultural Energy Consultants, 781 Holt Road Plainfield, VT 05667

**GENERATION INTERCONNECTION AGREEMENT**

BETWEEN

**CENTRAL VERMONT PUBLIC SERVICE CORPORATION**

AND

**DUBOIS ENERGY, LLC**

FOR THE

**713 KVA FARM METHANE  
(450 KW Vermont SPEED Standard Offer Program)**

**ELECTRIC GENERATING PROJECT**

The purpose of this Agreement is to allow the operation of electrical generation facilities interconnected with and operated in parallel with Central Vermont Public Service Corporation's electrical system.

Effective Date: \_\_\_\_\_.

*September 17, 2010*

CENTRAL VERMONT PUBLIC SERVICE CORPORATION  
GENERATION INTERCONNECTION AGREEMENT  
DUBOIS FARM, INC ELECTRIC GENERATING PROJECT

This AGREEMENT ("Agreement") made as of September \_\_\_\_\_, 2010 ("Effective Date"), by and between CENTRAL VERMONT PUBLIC SERVICE CORPORATION, ("CVPS"), a Vermont corporation, and DUBOIS ENERGY LLC. ("Non-Utility Generator" or "NUG"), a Vermont corporation (individually a "Party" and together the "Parties").

WITNESSETH:

WHEREAS, the NUG proposes to own and operate a 713 kVA electrical generating facility (450 KW Vermont SPEED Standard Offer Program) that utilizes the anaerobic digestion of agricultural products, byproducts or wastes to produce electricity (the "Generation Facility" or "Facility") located at 2038 RT 17E in the Town of Addison, Vermont, for the purpose of generating electric power; and

WHEREAS, the NUG intends to operate the Generation Facility on the CVPS distribution system pursuant to VPSB Rule 5.500; and

WHEREAS, under the terms contained in this Agreement the NUG desires to operate the Generation Facility interconnected in parallel with CVPS's electric system;

NOW, THEREFORE, in consideration of the mutual promises herein contained, the Parties hereto agree that the following terms and conditions shall govern the operation and maintenance of the interconnection of the NUG's Generation Facility with CVPS's electric system.

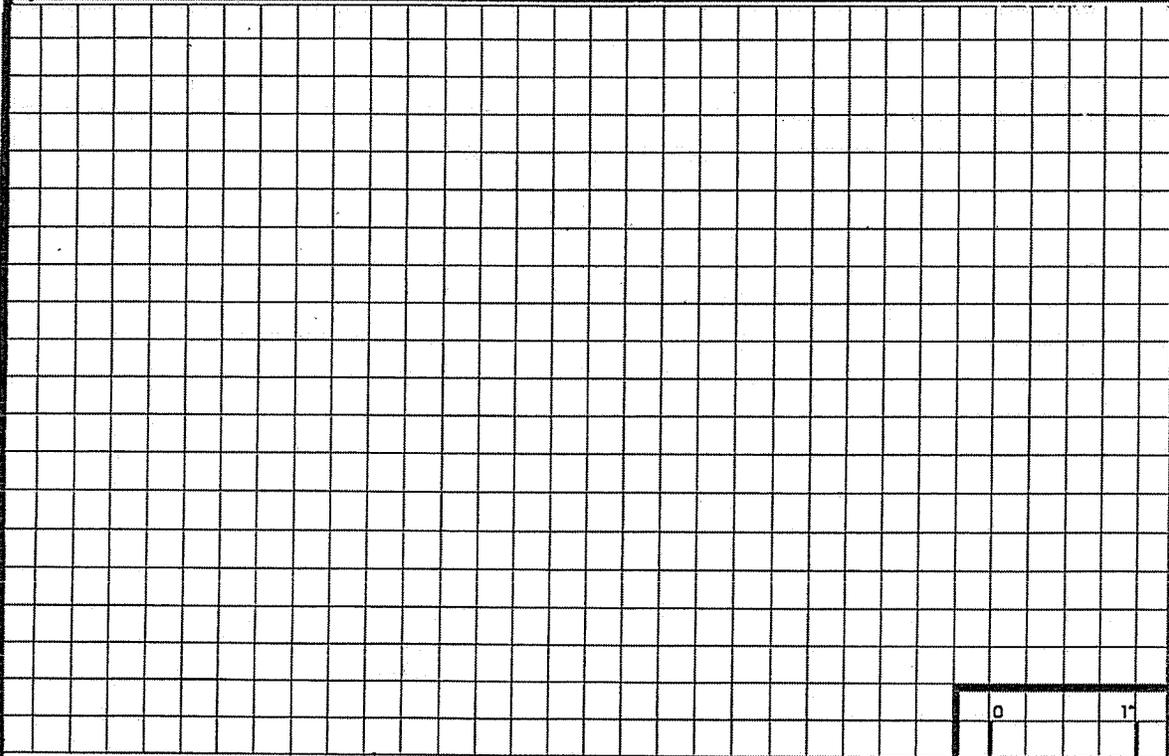
1. DEFINITIONS

For the purposes of this Agreement, the terms shall have the following meanings:

- a. Interconnection Point ("PCC" or "Point of Common Coupling") shall be the point where the CVPS' distribution system connects with the NUG's facility, specifically Line 3 Pole 102-6PT at the point where the CVPS conductor is attached to the customer owned dead end insulators in Addison, Vermont to allow the NUG's generation equipment to operate interconnected in parallel with the CVPS' electric system.
- b. Prudent Engineering and Operating Practices shall mean the practices, methods and acts (including, but not limited to, the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry) that at a particular time, in the exercise of reasonable judgment in light of the facts known or that should have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with law, regulation (including, but not limited to the National Electric Safety Code, the National Electric Code and other applicable codes), reliability, safety, environmental protection, economy and expedition. With respect to the Facility, Prudent Engineering and Operating Practices include but are not limited to taking reasonable steps to ensure that:

GENERAL DESCRIPTION OF PROPOSAL									
APPLICANT'S NAME: BUSINESS NAME: (IF ANY) APPLICANT'S MAILING ADDRESS: APPLICANT'S PHONE NUMBER: LOCATION:	APPLICATION FOR: (CHECK ✓ HERE) <table style="width:100%; border-collapse: collapse;"> <tr><td style="width:10px;">1</td><td>ZONING PERMIT</td></tr> <tr><td>2</td><td>SUBDIVISION PERMIT</td></tr> <tr><td>3</td><td>SIGN PERMIT</td></tr> <tr><td>4</td><td>HOME OCCUPATION</td></tr> </table> PROPERTY OWNER: AREA OF LOT: SURVEYED:      YES      NO	1	ZONING PERMIT	2	SUBDIVISION PERMIT	3	SIGN PERMIT	4	HOME OCCUPATION
1	ZONING PERMIT								
2	SUBDIVISION PERMIT								
3	SIGN PERMIT								
4	HOME OCCUPATION								
Nature of work:      New      Addition      Alteration      Other									
Use or Occupancy:      Existing      Proposed									
Setback from: Road Right of Way      Rear      Side      Side									
Building Length      Width      No. Stories									
Type of Water System      Type of Sewage System									

USE SPACE BELOW TO SKETCH PLOT PLAN • REFER TO INSTRUCTIONS ON BACK OF FORM.



**VALUATION OF PROPOSED PROJECT \$**

I HEREBY CERTIFY THAT THE STATEMENTS ON THIS APPLICATION ARE CORRECT AND THAT I WILL COMPLY WITH THE VERMONT AND NEW HAVEN REGULATIONS COVERING THE WORK TO BE DONE.

SIGNED BY PROPERTY OWNER: \_\_\_\_\_ SIGNED BY APPLICANT (IF DIFFERENT FROM OWNER): \_\_\_\_\_

SUBMIT FORM INTACT WITH FEE PAYABLE TO "TOWN OF NEW HAVEN"

DO NOT WRITE BELOW THIS LINE FOR TOWN USE ONLY.

APPLICATION FEE \$	RECEIVED BY	COMPLETE APPLICATION FILED
ZONE	CHECKED BY	DATE APPROVED
1 ZONING PERMIT		
2 SUBDIVISION PERMIT		
3 SIGN PERMIT		
4 HOME OCCUPATION		
5		
6		
7		

STATE PERMIT(S) REQUIRED      YES  NO

SUBMIT COPY(S) TO TOWN      YES  NO  COPY(S) OF STATE APPROVAL TO BE SUBMITTED \_\_\_\_\_

**NOTE ► ZONING PERMIT TO TAKE EFFECT 15 DAYS FROM DATE OF ISSUANCE.**

FEE \$ \_\_\_\_\_ TOTAL \$ \_\_\_\_\_ PAID \$ \_\_\_\_\_ BILL ENCLOSED      DATE OF ISSUANCE      ISSUED BY      ADMIN. OFF.

CERTIFICATE OF OCCUPANCY ISSUANCE      DATE INSPECTED      DATE ISSUED      ISSUED BY: \_\_\_\_\_

SEE ATTACHED INFORMATION AS CONDITIONS FOR APPROVAL.      BZA MINUTES \_\_\_\_\_ PG MINUTES \_\_\_\_\_ ADMINISTRATIVE REQUIREMENTS \_\_\_\_\_

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- (1) Preventative, routine and non-routine maintenance and repairs are performed on a basis that ensures reliable long-term and safe operation, and are performed by knowledgeable, trained and experienced personnel utilizing proper equipment and tools.
- (2) Equipment is not operated in a reckless manner, or in a manner unsafe to the public or the environment.

2. DESCRIPTION OF THE FACILITY AND THE SITE

The Facility shall have the characteristics as described in Section 5 Generation and Interconnection Facilities and in the Technical Requirements attachment to this Agreement.

3. GOVERNMENTAL ACTIONS

NUG and CVPS shall at all times comply with all valid and applicable Federal, State and Local laws, rules, regulations, orders and other governmental actions.

The Parties intend the procedures contained in Rule 5.500 shall apply to their interconnection. To the extent this agreement provides any procedure or process inconsistent with Rule 5.500, unless otherwise expressly provided to the contrary, the Parties intend the procedures and processes contained in Rule 5.500 shall apply.

4. TERM

This Agreement shall become effective upon execution and satisfaction of the Conditions Precedent set forth herein, and shall continue in full force and effect for a period of 20 years (through the end of the NUG's Vermont SPEED Standard Offer Purchase Power Agreement Term) from the date hereof. Nothing in this Agreement shall be deemed to preclude future agreements between the Parties. Following the end of the Term, the Parties hereto shall no longer be bound by the terms and conditions of this Agreement, except to the extent necessary to enforce the rights and obligations of the Parties arising under this Agreement before the end of the Term.

5. GENERATION AND INTERCONNECTION FACILITIES

Under this Agreement, specific requirements for the interconnection of the NUG's Facility to the CVPS' electric system are identified below and on the **Technical Requirements** attachment to this Agreement. The NUG is responsible for the design of these interconnection facilities and CVPS has the right to approve or disapprove the design of the interconnection facilities. Should a dispute concerning the interconnection facilities exist, either Party may initiate action pursuant to Section 14 Dispute Resolution. These procedural requirements are to provide protection to the public and to the personnel and equipment of the NUG and CVPS from the physical and financial risks associated with the

interconnection and parallel operation of the proposed generator. Both CVPS and the NUG represent that their workers and personnel will conduct their business consistent with Prudent Engineering and Operating Practices at all times.

- a. The NUG shall install generation and interconnection facilities as described below and on the **Technical Requirements** attachment to this Agreement and maintain them in good working order, consistent with Prudent Engineering and Operating Practices, while interconnected with CVPS's electric system:

Generation equipment –

Generator	<u>KVA</u>	<u>RPM</u>	<u>Volts</u>
	713	1200	480

and an electric line to connect said generation equipment through appropriate interconnection facilities to CVPS's electric system at the Interconnection Point designated specifically at Line 3 Pole 102-6PT at the point where the CVPS conductor is attached to the customer owned dead end primary insulators.

- b. The NUG shall install transformation and associated facilities necessary to convert the output of the generation equipment to the voltage, frequency, and phase of the CVPS' electric system at the designated Interconnection Point.
- c. The NUG shall install a secondary voltage three phase load break disconnect device adequate to provide safe working clearance for CVPS personnel. It shall be accessible to and available for control by CVPS personnel at all times. When CVPS has opened and tagged the disconnect device, the NUG **SHALL NOT OPERATE** the disconnect device without prior approval from CVPS's representative designated on the tag attached to the disconnect device.
- d. The NUG shall install relaying and protective devices that will automatically and physically disconnect the NUG's generation equipment from the CVPS' electric system whenever required by a fault or abnormal frequency or voltage condition on the CVPS' electric system, until that system shall return to a normal status. Such devices shall **not** automatically reconnect the NUG's generation equipment to the CVPS' electric system after such an occurrence unless automatic phasing equipment is installed.

The NUG owned and operated protective equipment shall include:

- Circuit Breaker (52)
- Over/Under Voltage Relays (27 / 59)
- Over/Under Frequency Relay (81 O/U)
- Unbalanced CVPS System Fault Detection Relay (59N)

- Voltage Restrained Time Over-current Relay (51V)
  - Loss of Excitation Relay (40)
  - Synchronism Check Relay (25)
  - The ability to implement a transfer trip signal initiated by CVPS
  - Additional Required Devices based on interconnection Studies
- e. The NUG shall install such reactive power generating facilities as necessary so that the NUG's generation facilities operate within the power factor requirements specified in Section 6.b Electric Characteristics.
- f. The NUG shall install and maintain metering equipment adequate to accurately measure and record capacity and energy delivered by its generating facility in a manner consistent with provisions as specified in the Metering Agreement and for payment in any power or attributes purchase arrangements entered into by and between the Parties.
- g. The NUG shall install a voice quality phone line so that the hourly production of the NUG generation facility can be reported in a timely manner to the VELCO/NEPOOL system.
- h. The NUG is responsible to make any future enhancements to its facilities that may become necessary to operate the NUG's Generation Facility in a safe and prudent manner due to improvements and/or changes made to the CVPS' electric system. Failure to do so will result in disconnection of the NUG generation facility from the CVPS' electric system. CVPS shall inform the NUG in writing in a timely manner of all such improvements or changes to its electric system that may require future enhancements to the NUG's facilities, identifying the improvements and/or changes and CVPS's position whether they require the NUG to make enhancements to its facilities. CVPS agrees to work with the NUG to ensure that such enhancements meet CVPS's system requirements.

## 6. ELECTRIC CHARACTERISTICS

- a. The NUG shall generate electricity at its Facility in such a manner that it is compatible with the CVPS' electrical system at the Interconnection Point.
- b. The NUG shall produce power, from synchronous generators, at power factor levels between 0.98 leading and 0.98 lagging at the Interconnection Point, unless otherwise requested, in writing, from CVPS.
- c. Should the NUG fail to meet the power factor levels required under this section of the Agreement, in addition to any other remedies that may be available, the NUG shall pay CVPS a charge for excess reactive power delivered by CVPS to the NUG as determined by the rate schedule for which the NUG takes electric service via the Company's retail tariff.

## 7. TESTING AND MAINTENANCE OF INTERCONNECTION FACILITIES

- a. Prior to the initial closing of the interconnection, the NUG shall have a determination made that all interconnection equipment meets the specifications and is functioning properly, and CVPS is notified in writing. The NUG shall promptly certify the results of such testing to CVPS. The NUG shall furnish a copy of all relay settings to CVPS. On site commissioning shall be performed in cooperation with CVPS and the NUG's generation contractor.
- b. The NUG shall be responsible for the maintenance of the interconnection facilities owned by it and for keeping the same in good working order while interconnected with the CVPS' electric system. Maintenance by the NUG shall include regularly scheduled testing of relaying and protective devices in a manner acceptable to CVPS as recommended by the manufacturer of such equipment and consistent with Prudent Engineering and Operating Practices. The NUG shall be responsible for the cost for CVPS to perform maintenance and testing on the CVPS owned protective devices necessary for interconnection of the NUG's Generation Facility to the CVPS' electric system and for periodic testing of the metering equipment as defined in the Metering Agreement. Such maintenance and testing by CVPS is to be conducted consistent with Prudent Engineering and Operating Practices.
- c. CVPS shall have the right, at all reasonable times and upon reasonable notice to the NUG, to inspect the NUG's generation and interconnection facilities, to conduct such operating tests as are necessary to ascertain that the generation, interconnection, and metering facilities function properly, to review any data collected from such facilities, and to independently monitor the energy delivered to CVPS. While CVPS is under no duty to inspect the NUG's generation and interconnection facilities for the purposes of determining if said equipment or facilities pose a risk to the NUG, should CVPS learn of any problems or risks to the NUG's facilities it shall inform the NUG of such problems or risks at the earliest reasonable time.
- d. Any inspection, operational testing, or witnessing of testing by CVPS under the provisions of this Agreement shall not be construed as any warranty of safety, durability or reliability of the NUG's generation interconnection. CVPS shall not, by reason of such inspection or failure to inspect, be responsible for the strength, safety, design, adequacy, or capacity of the NUG's interconnection equipment. Any inspection, operational testing, or witnessing of testing by CVPS shall be done consistent with Prudent Engineering and Operating Practices.

## 8. DISCONNECTION OF INTERCONNECTION FACILITIES

- a. NUG agrees to operate the interconnection facilities so that no adverse effect shall occur to the CVPS' electric system or to any of CVPS's other customers. Should such adverse effects occur, as reasonably defined by CVPS, or should the potential for such adverse effect exist, the NUG agrees to take such corrective action, as CVPS deems reasonably necessary; provided, however, that the NUG shall retain the right to contest

the reasonableness of the CVPS actions before the Public Service Board or any other appropriate forum.

- b. Consistent with Public Service Board Rule 5.509 (C), CVPS has the right to immediately disconnect, without liability, the NUG's generation equipment from the CVPS' electric system if, in CVPS' reasonable opinion, the interconnection represents a condition that is likely to result in imminent significant disruption of service to CVPS' customers or is imminently likely to endanger life or property. Should a dispute concerning the need to immediately disconnect exist, either Party may initiate action pursuant to Section 14 Dispute Resolution.
- c. If the interconnection presents a risk, which, if left unattended, could result in imminent significant disruption of service to CVPS' customers, or could become likely to endanger life or property, CVPS will give the NUG notice in writing of the corrective measures it seeks to have implemented and a reasonable time period for such implementation. If the corrective measures are not implemented within the reasonable time period, CVPS may immediately disconnect, without liability, the NUG's generation equipment. Should a dispute concerning the need to immediately disconnect exist, either Party may initiate action pursuant to Public Service Board Rule 5.509 (C) and (D).
- d. CVPS may open or require the NUG to open the interconnection whenever reasonably necessary to perform either routine or emergency maintenance or repairs to CVPS' own facilities or facilities of interconnected utilities. Except for emergencies, CVPS shall give reasonable advance notice of such maintenance or repairs and shall attempt to schedule the same in order to accommodate the NUG's operating schedule. Should a dispute concerning the need to disconnect exist, either Party may initiate action pursuant to Public Service Board Rule 5.509 (C) and (D).
- e. In all cases when CVPS has caused the NUG's facilities to be disconnected from the CVPS's electric system, CVPS shall resume the interconnection as soon as maintenance or repair work ceases or when the NUG has completed required corrective actions.

## 9. INTERRUPTION OF INTERCONNECTION

CVPS shall endeavor to make the interconnection under this Agreement as continuous and uninterrupted as it reasonably can. Electric service is subject to variations in its characteristics or interruptions to its continuity. Therefore, the characteristics of the electric service may be varied or such service to the NUG may be interrupted, curtailed, or suspended in the following described circumstances:

- a. When conditions in a part or parts of the interconnected transmission/distribution-generation system of which CVPS facilities are a part make it appear necessary for the common good; or

- b. When such variance, interruption, curtailment or suspension is caused by war, flood, storm, drought, strike or other cause beyond the control of CVPS, or by any cause except willful default on CVPS's part.

10. ELECTRIC SERVICE

Except as otherwise provided for herein, the NUG will receive and pay for electricity taken from the CVPS' electric system in accordance with all relevant terms and conditions in the CVPS tariffs for electric service, as filed with the Vermont Public Service Board and as the same shall be modified from time to time.

11. INDEMNIFICATION

Notwithstanding any other provision herein, and to the fullest extent permitted by law, each Party shall hold harmless, defend (as directed), and indemnify the other Party, its directors, officers, employees, agents, invitees, affiliates, subsidiaries, successors and assigns of, from and against any and all damages, losses, claims, liabilities, penalties, forfeitures, suits, settlements, judgments, awards, and the costs and expenses incident thereto (including reasonable attorney's fees) for any and all loss, violation, damage, or injury to person or property of whatever type or nature which shall be caused by, arise out of, or in any manner be the result of that Party's own negligent acts or omissions during the Term of this Agreement. The indemnifying party shall pay all costs (including reasonable attorney's fees and costs) that may be incurred by the other party in enforcing this indemnity.

12. CONSEQUENTIAL DAMAGES

Notwithstanding any other provision herein, CVPS shall not be liable to NUG for any special, indirect, consequential, incidental, punitive or exemplary damages, including but not limited to loss of profits, nor shall NUG be liable to CVPS for such damages or loss of profits.

13. INSURANCE

NUG shall maintain in force, liability coverage with minimum limits of \$1,000,000.

If requested by CVPS, the NUG shall provide a certificate(s) of insurance, which names CVPS as an additional insured, and which shall specify the description of operations being covered as an interconnected NUG, or other appropriate language. Updated certificates shall be provided to the CVPS as requested.

The option of insuring the electrical generating equipment and other customer owned interconnection and related equipment, for physical damage, loss et al., shall remain the responsibility of the NUG.

The insurance coverage described above shall be primary to any other coverage available to CVPS or to affiliates and shall not be deemed to limit the NUG's liability under this Agreement.

Should NUG fail to provide the insurance required pursuant hereto, nothing herein shall release NUG of the obligation to pay any claims that arise hereunder.

Upon request of CVPS, NUG shall provide CVPS a copy of each insurance policy required hereunder.

The insurance limits required under this agreement shall be subject to periodic review by the Interconnecting Utility and updated in order to take into account changed circumstances.

CVPS and NUG shall maintain in full force and effect a policy or policies of insurance sufficient to insure their respective obligations under workers compensation law. In connection herewith, NUG acknowledges that in satisfaction of this provision CVPS may self-insure its obligations under applicable workers compensation law and to maintain an Excess Workers Comp Policy for the remainder.

14. DISPUTE RESOLUTION

Any dispute arising from or under the terms of this Agreement shall be subject to the dispute resolution procedures contained in Rule 5.500.

15. ASSIGNMENT / SUCCESSORS

Neither the NUG nor CVPS may voluntarily assign its rights or delegate its duties under this Agreement or any part thereof, without the written consent of the other (which consent shall not be unreasonably withheld), except, in the case of CVPS, in connection with the sale, merger, or unbundling of services as a result of legislative and regulatory electric restructuring approved by the Board. Should the NUG sell its farm or otherwise transfer its ownership, CVPS shall not unreasonably withhold its approval of the successor in interest. No assignment or delegation shall discharge any Party from obligations which shall have accrued under the terms of this Agreement prior to such assignment or delegation, whether such accrual is known or unknown.

16. NOTICES

Except as otherwise specified in this Agreement, any notice, demand, or request required or authorized by this Agreement to be given in writing to a Party shall be either personally delivered or mailed postage prepaid to such Party at the following address:

**CVPS: Central Vermont Public Service Corporation  
Attn: Kim Jones, PE  
77 Grove Street  
Rutland, Vermont, 05701-3400**

**NUG: Dubois Energy, LLC.  
Attn: Bernard Dubois  
2038 VT Route 17E  
Addison Vermont, 05491**

The designation of such person and/or address may be changed at any time by either Party upon written notice given pursuant to the requirements of this Section.

17. APPLICABILITY

This Agreement constitutes the entire understanding between the Parties with respect to the subject matter hereof, supersedes any and all previous understandings between the Parties, and binds and inures to the benefit of the Parties, their successors and assigns.

18. WAIVER

No waiver by either Party of the performance of any obligation under this Agreement or with respect to any Default or any other matter arising in connection with this Agreement shall be deemed a waiver with respect to any subsequent performance, obligation, default, or matter.

19. MODIFICATION

No modification or waiver of all or any part of this Agreement shall be valid unless it is in writing and signed by both Parties.

20. INTERPRETATION

Interpretation and performance of this Agreement shall be in accordance with, and shall be controlled by, the laws of the State of Vermont and the United States.

21. NO DUTY TO THIRD PARTIES

Nothing in this Agreement nor any action taken hereunder shall be construed to create any duty, liability or standard of care to any person not a Party to this Agreement.

22. CONDITIONS PRECEDENT

This Agreement shall not become effective until the following conditions precedent shall have been satisfied:

- a. The issuance by the Board of a permit pursuant to 30 V.S.A. § 248 approving the construction, ownership and operation of the Facility in a form acceptable to the NUG; and
- b. The Parties shall have established appropriate relay and protection requirements for the interconnection of the Facility that are acceptable to CVPS, which requirements shall be reflected in a **Technical Requirements** appendix to be made a part hereof; and
- c. The Parties shall have established appropriate operating protocols for the interconnected operation of the Facility in parallel with the CVPS electric system, which protocol shall be reflected in an **Operating Protocols** appendix to be made a part hereof.

IN WITNESS WHEREOF, CVPS and the NUG have caused this Agreement to be executed by their respective duly authorized officers as of the date first above written.

**DUBOIS ENERGY, LLC**

By: *Bernard M. Dubois*  
Bernard M. Dubois

Its: *Member - Manager*

**CENTRAL VERMONT PUBLIC SERVICE CORPORATION**

By: *Gregory A. White*  
Gregory White

Its: Director ~~F&D Engineering~~  
*Engineering & System Operation*

DATE: *September 20, 2010*

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7584

Petition of Dubois Farm, Inc. and Dubois Energy, )  
LLC ("Dubois Farm") for a Certificate of Public )  
Good, pursuant to 30 V.S.A. Section 248(j), )  
authorizing the installation and operation of a )  
450-kW agricultural-methane electrical generating )  
facility at a dairy farm owned by Dubois Farm, )  
Inc., located at 2038 Route 17E in Addison, )  
Vermont )

Order entered: 5/13/2010

**I. INTRODUCTION**

This case involves a petition filed jointly by Dubois Farm, Inc. and Dubois Energy, LLC (collectively, "Dubois Farm") requesting a certificate of public good under 30 V.S.A. § 248(j) to install and operate a 450-kW agricultural-methane electrical generating facility at a dairy farm owned by Dubois Farm, Inc., located in Addison, Vermont. In today's Order, we conclude that the proposed project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

**II. PROCEDURAL HISTORY**

On November 25, 2009, Dubois Farm filed a petition with the Public Service Board ("Board") requesting a certificate of public good under 30 V.S.A. § 248(j) to install and operate a 450-kW agricultural-methane electrical generating facility at a dairy farm owned by Dubois Farm, Inc., located in Addison, Vermont. The generating facility would be interconnected with Central Vermont Public Service Corporation's ("CVPS") distribution system. Dubois Farm submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

On November 25, 2009, the Agency of Agriculture, Food and Markets ("AAFM") filed a letter stating its support for the project and outlining some of the project's benefits, including helping the farm comply with state and federal environmental regulations.

Notice of the petition was sent on January 28, 2010, to all entities specified in 30 V.S.A. § 248(a)(4)(c) and other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before March 1, 2010. A similar notice of the filing was published in *The Addison County Independent* on February 1, 2010, and February 8, 2010.

On March 1, 2010, the Vermont Department of Public Service ("Department") filed a letter stating that the petition does not raise a significant issue with respect to the criteria of 30 V.S.A. § 248 and a certificate of public good should be issued, on the condition that the system impact study ("SIS") recommendations be implemented at Dubois Farm's expense.

On March 1, 2010, the Department filed a letter stating that the Department found Dubois Farm's petition consistent with the *Vermont Electric Plan*, pursuant to 30 V.S.A. § 202(f).

On March 10, 2010, Dubois Farm filed a letter stating that it does not plan to use off-farm feedstock, but that it would like the flexibility, if there is a future need, to supplement on-farm feedstock with off-farm feedstock. Dubois Farm also stated that it discussed its potential need for off-farm feedstock with the Agency of Natural Resources ("ANR") and agreed to obtain all necessary permits or approvals required by the AAFM or ANR. In addition, Dubois Farm stated that it would not object to a Board condition to this effect.

On March 12, 2010, ANR filed a letter stating that if Dubois Farm intends to utilize off-farm feedstock, it needs to notify *both* the AAFM and ANR and obtain all necessary permits or approvals from *both* the AAFM and ANR.

No other comments on the petition were filed.

The Board has determined that the proposed construction will be of limited size and scope and that the petition, as supplemented, has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures

authorized by 30 V.S.A. § 248(j) are sufficient to satisfy the public interest, and no hearings are required.

### III. FINDINGS

1. Dubois Farm, Inc., is a corporation that owns and operates a dairy farm with approximately 1,000 milking cows and 1,200 dry cows, heifers, and calves in Addison, Vermont ("the Farm"). Bernard Dubois and his two brothers own ninety-eight percent of the stock of Dubois Farm, Inc. Dubois Farm, Inc. entered into a long-term lease with Dubois Energy, LLC, a Vermont domestic limited liability company, that is leasing land for the operation and management of the proposed project. Dubois pf. at 1-3.

2. Dubois Farm proposes to construct and operate an electrical generating facility ("the Project") on the Farm. The Project will use methane gas derived by processing raw manure and other feedstock in a digester located on the Farm. The generator will produce up to 450 kW of electricity. Dubois pf. at 8-9.

3. The Project is intended to be a Sustainably Priced Energy Enterprise Development ("SPEED") resource so that it may qualify to sell power at the standard-offer price pursuant to 30 V.S.A. § 8005(b)(2).<sup>1</sup> The Project is currently in the SPEED standard-offer queue. The Project's environmental attributes (renewable energy credits), distinct from the electrical output, will be sold separately to the CVPS Cow Power program. Dubois pf. at 4, 18-19.

4. The Project will include the construction of three buildings: an enclosed, concrete anaerobic manure digester produced by GHD, Inc. of Chilton, Wisconsin (approximately four to five feet above-ground);<sup>2</sup> a building for the separator and bedding storage (approximately fifty feet by 120 feet); and a building for the generator (approximately forty feet by fifty feet). The Project is designed to be consistent in appearance and color with existing structures and will be

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1. For more information about the SPEED or standard-offer program visit the VermontSPEED website at <http://vermontspeed.com/standard-offer-program/> or the Board's Implementation of Standard Offer Prices for SPEED website page at <http://psb.vermont.gov/docketsandprojects/electric/7523>.

2. Dubois Farm failed to provide the complete dimensions of the digester. Exhibit DF-BD-2 provides some sense of the size of the digester, but the exhibit does not include a scale. Prior to construction, Dubois Farm must file, for Board approval, a letter providing the dimensions of the digester.

constructed entirely on the Farm property, within the existing farmstead complex, and immediately adjacent to existing farm buildings. Dubois pf. at 5-8, 25-26, 32-33; exhs. DF-BD-2, 3, and 4.

5. The digester will process cow manure produced at the Farm by the existing herd. The manure will be pumped from the stall barn into an existing storage tank ("reception pit") and then into the digester, where it will be mixed and heated. The naturally resulting decomposition will produce methane gas and biosolids. The methane will be collected and used to fuel a reciprocating engine that runs a generator and produces energy. The biosolids will be pumped from the effluent pit at the end of the digester to a mechanical separator. The liquid and solids, with their pathogens and odor characteristics now greatly reduced by the digestion process, will be separated out. The solids will be treated and primarily used as bedding for the Farm's cows, which will allow the Farm to save on the cost of sawdust and reduce its phosphorous release. Any remaining solids will be either used as fertilizer or sold to other farms as bedding or to nurseries and landscapers as soil amendment. The liquid waste will gravity-flow into an existing earthen lagoon (formerly used for manure) and then used as fertilizer. The liquid waste provides a higher grade fertilizer than raw manure and contains less phosphorous. Some of the remaining "waste" heat from the generator engine will offset the fuel used for the milkhouse's hot water needs. Dubois pf. at 6-9, 11-18.

6. Currently, Dubois Farm plans to use on-farm manure as feedstock. Dubois Farm does not plan to use off-farm feedstock, but would like the flexibility to supplement the Project's on-farm feedstock with off-farm feedstock, if there is a future need.<sup>3</sup> Dubois pf. at 6, 11; letter from Gerald R. Tarrant, Esq., to Susan Hudson, Clerk of the Board, filed March 10, 2010.

7. The Project will interconnect with CVPS's existing three-phase distribution system. The Project does not require installation of new utility poles. The electrical cable connecting the

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3. To qualify for a SPEED standard-offer contract, agricultural-methane projects must derive "at least 51% of the feedstock . . . from agricultural operations." *Second Order Re Implementation Issues*, Docket 7533, Order of 10/28/09 at 5-7 (referencing the Vermont Energy Act of 2009, Public Act No. 45 (2009 Vt. Bien. Sess.) §§ 8005(b)(2)(A)(I) and 8005(g)(3)). To qualify as feedstock derived from agricultural operations, a feedstock must be produced for some other purpose than solely that of providing a fuel source for generation. Docket 7533, Order of 10/28/09 at 6.

generator to CVPS's distribution system will be buried from the generator building to an existing utility pole. Dubois pf. at 6, 9, 26.

### **Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

8. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 9 and 10, below.

9. The Addison Planning Commission and the Addison County Regional Planning Commission both endorse the Project as being consistent with the town and regional plans. Dubois pf. at 20-25; exhs. DF-BD-5, 6, 7, 8 and 9.

10. The town and regional plans both expressly support renewable energy. The regional plan specifically highlights support for farm-based bio-gas development. The Addison Planning Commission's letters noted the Project's positive economic and environmental benefits, including improved water quality and a reduction in farm odors. Exhs. DF-BD-5, 7, 8 and 9.

### **Need for Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

11. The Project is a SPEED resource so that Dubois Farm may sell power under the standard-offer program. Dubois pf. at 18-19.

### **Discussion**

Pursuant to 30 V.S.A. § 8005(b)(8):

a demonstration of compliance with subdivision 248(b)(2) of this title, relating to establishing need for the facility, shall not be required if the facility is a SPEED resource and if no part of the facility is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers.

Dubois Farm has accepted a standard-offer contract under the Vermont SPEED program; accordingly, Dubois Farm does not need to demonstrate compliance with this criterion.

**System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

12. The Project will not adversely affect system stability and reliability. This finding is supported by findings 13 and 14, below.

13. The Project will be interconnected at 12.47 kV with CVPS's distribution system originating at the Weybridge 81 distribution circuit. CVPS has determined that the Project would not affect system stability or reliability, provided that the Project follows the requirements outlined in the SIS, which CVPS conducted for the Project. Dubois pf. at 4, 10; exhs. DF-BD-10 and 13.

14. The SIS identified the following recommendations to avoid undue adverse stability and reliability problems including the need for anti-islanding protection and a transfer trip scheme:

- (a) Controls must be placed to prevent the unit from starting and stopping more than once per hour.
- (b) All required items listed in Section 5 - Protection and Interconnection Requirements of the SIS must be strictly adhered to.
- (c) The Interconnection Agreement between CVPS and Dubois Farm must include terms and conditions addressing generator power factor, tripping, lockout, and re-start.

Exh. DF-BD-13; SIS, attached to letter of March 5, 2010, from Gerald Tarrant to Susan Hudson.

**Discussion**

The preliminary system impact study conducted by CVPS raised a concern that the Project may increase generator or system instability.<sup>4</sup> In response to the SIS, CVPS hired Phillip Barker, P.E., of Nova Energy Specialists, LLC ("Nova"), to determine the likelihood of stability issues.<sup>5</sup> After Nova's preliminary investigation, CVPS determined that the Project would not affect system stability or reliability, provided that the Project follows the requirements outlined in the SIS.<sup>6</sup> CVPS stated that it would provide Dubois Farm with an Interconnection Agreement

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4. Exhs. DF-BD-10 and 13.

5. Exhs. DF-BD-10 and 13.

6. Exhs. DF-BD-10 and 13.

before connecting the Project to the grid.<sup>7</sup> Although not expressly stated by Dubois Farm or CVPS, Dubois Farm is responsible for meeting the applicable codes and standards listed in PSB Rule 5.510 and for all costs of interconnection and any measures necessary to ensure that the Project does not disrupt system stability and reliability.

Accordingly, the Board concludes that before interconnecting with CVPS's distribution system, Dubois Farm must comply with the recommendations contained in the SIS to assure that the Project does not cause undue adverse impacts on system stability and reliability. Dubois Farm must also pay for all costs associated with the recommendations in the SIS as well as all interconnection costs. In addition, prior to operation of the Project, Dubois Farm shall enter into an interconnection agreement with CVPS and file the agreement with the Board and the Department and provide the Board and the Department with written documentation that the Project meets the applicable codes and standards listed in Board Rule 5.510.

#### **Economic Benefit to the State**

[30 V.S.A. § 248(b)(4)]

15. The Project will provide an economic benefit to the state and its residents. First, it will offer a local and renewable power source, adding diversity to the state's energy mix and displaces generation that uses fossil fuel. Second, the Project will enhance the economic viability of the Farm and the construction phase will employ numerous local contractors. Third, the Project will provide additional, indirect economic benefits including conserving the working landscape that is essential to Addison County. Finally, other indirect economic benefits to the general public include reduced odor from manure-spreading, improved nutrient management, and the reduction of greenhouse gases by removing methane, a significant greenhouse gas, from the atmosphere, by trapping it and burning it as fuel for the generator. Dubois pf. at 15-18; letter from Diane Bothfield, to Susan Hudson, Clerk of the Board, filed November 25, 2009.

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7. Exhs. DF-BD-10 and 13.

**Aesthetics, Historic Sites, Air and Water Purity,  
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

16. The Project, as proposed, will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 17 through 42, below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(A) and (9)(K).

**Outstanding Resource Waters**

[10 V.S.A. § 1424(a)(d)]

17. The Project will not be located on or near any outstanding resource waters. Dubois pf. at 28.

**Water and Air Pollution**

[10 V.S.A. § 6086(a)(1)]

18. The Project will not result in undue water or air pollution. This finding is supported by findings 19 through 31, below.

19. The Project will reduce the release of methane gas and odor from manure. Dubois pf. at 5, 15-16.

20. The Project will convert raw manure into biosolids for bedding, which reduces the oxygen demand and pathogen population of animal waste, thereby reducing latent negative impacts on water quality. Dubois pf. at 15.

21. The Project will convert raw manure into liquid waste before spreading it as fertilizer on the Farm's fields, thus reducing the amount of manure stored in lagoons and the amount of organic nitrogen released into the environment. Dubois pf. at 12, 15.

22. The Project will produce air emissions from burning methane in the generator's engine and from flaring excess methane from the digester. The Air Pollution Control Division of the ANR reviewed the emissions data, stack, and flare specifications and, as set forth in a letter dated

April 29, 2009, determined that an air pollution control permit is not required, but included four operating conditions as part of that determination. Exh. DF-BD-12.

23. ANR's four operating conditions are as follows:

(1) The Dubois Farm shall only install and operate a Guascor model SFGLD 360 internal combustion engine. Dubois Farms shall not install an alternative engine without prior written approval from [ANR]. The engine shall be maintained in good working order at all times and operated and maintained in accordance with the manufacturer's operation and maintenance recommendations.

(2) The Dubois Farm shall design and operate the biogas-to-energy Facility in such a manner that any biogas which is not combusted in the engine is routed to a flare that is designed and operated in accordance with 40 *CFR* Part 60, Subpart A, §60.18. The flare shall also be equipped with a properly sized windscreen to prevent blowout of the flame. All elements of the flare system shall be maintained in good working order at all times and operated and maintained in accordance with the manufacturer's operation and maintenance recommendations.

(3) The flare shall be equipped and operated with an automatic ignition system, such as a spark ignition system or a continuous pilot light, to ensure immediate and continuous combustion of any biogas that is routed to it. Spark igniters may be powered by the grid or an acceptable alternative power source.

(4) Dubois Farms shall register its air emissions with [ANR] annually in accordance with Subchapter VII of the Vermont Air Pollution Control Regulations. . . .

Exh. DF-BD-12.

Discussion

Dubois must meet the conditions listed in the Air Pollution Control Division's letter dated April 29, 2009, to ensure that the Project complies with this criterion.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

24. The Project will not be located on or near any headwaters area. Dubois pf. at 28.

### Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

25. The Project will improve current waste disposal practices. This finding is supported by findings 25 and 26, below.

26. The digester is a sealed container, which will not release untreated waste. The Project will not require new toilet facilities. Dubois pf. at 8, 28.

27. The Project will help Dubois Farm meet the goals of its nutrient management plan in compliance with its Large Farm Operating (LFO) Permit, issued by the AAFM, which addresses environmental concerns with field application of manure and the waste stream and digestion process. The Project allows the Farm to transition to an advanced manure management system. Letter from Diane Bothfield, to Susan Hudson, Clerk of the Board, filed November 25, 2009; Dubois pf. at 5, 15, 20, 33.

### Discussion

Currently, Dubois Farm plans to use on-farm manure as feedstock.<sup>8</sup> Dubois Farm does not plan to use off-farm feedstock, but would like the flexibility to supplement the Project's on-farm feedstock with off-farm feedstock, if there is a future need.<sup>9</sup> The Project's potential use of off-farm feedstock raises several concerns, including compliance with state regulation and potential storage and odor issues.

On March 12, 2010, ANR filed a letter stating that if Dubois Farm intends to utilize off-farm feedstock, it needs to notify both the AAFM and ANR and obtain all necessary permits or approvals from *both* the AAFM and ANR.<sup>10</sup> Dubois Farm is amenable to a Board condition to that effect. Therefore, if Dubois Farm intends to use or store any off-site resources for this project, it shall: (1) notify the Board, ANR, and AAFM and file, for Board approval, a plan for handling and storing off-farm feedstock; (2) obtain all necessary permits or approvals required by ANR and AAFM; and (3) load all semi-solid feedstock into the digester hopper, and feed it

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8. Dubois pf. at 6, 11; letter from Gerald R. Tarrant, Esq., to Susan Hudson, Clerk of the Board, filed March 10, 2010.

9. Dubois pf. at 11; letter from Gerald R. Tarrant, Esq., to Susan Hudson, Clerk of the Board, filed March 10, 2010.

10. Letter from Judith Dillon, to Susan Hudson, Clerk of the Board, filed March 12, 2009.

into the digester tanks, on the same day as delivery, in order to eliminate the need for on-site storage and minimize potential odors.

Additionally, to qualify for a SPEED standard-offer contract, agricultural-methane projects must derive "at least [fifty-one percent] of the feedstock . . . from agricultural operations" and, to qualify as feedstock derived from agricultural operations, a feedstock must be produced for some other purpose than solely that of providing a fuel source for generation.<sup>11</sup> Accordingly, Dubois Farms must also keep accurate records of the quantity of each type of feedstock utilized in the digester and report these quantities to the Board annually.

#### **Water Conservation**

[10 V.S.A. § 6086(a)(1)(c)]

28. The Project will not require a new water supply and there should be no impact on existing water use. Dubois pf. at 29.

#### **Floodways**

[10 V.S.A. §§ 6086(a)(1)(D)]

29. The Project is not located within a floodway. Dubois pf. at 29.

#### **Streams**

[10 V.S.A. §§ 6086(a)(1)(E)]

30. The Project will have no impact on streams, since no improvements will be located on the banks of a stream. Dubois pf. at 29.

#### **Shorelines**

[10 V.S.A. §§ 6086(a)(1)(F)]

31. The Project is not located near a shoreline. Dubois pf. at 29.

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11. *Second Order Re Implementation Issues*, Docket 7533, Order of 10/28/09 at 5-7 (referencing the Vermont Energy Act of 2009, Public Act No. 45 (2009 Vt. Bien. Sess.) §§ 8005(b)(2)(A)(I) and 8005(g)(3)).

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

32. The Project will not impact wetlands. None of the Project construction or operations will occur in or near any wetlands. Dubois pf. at 30.

**Sufficiency of Water and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(2)and(3)]

33. The Project will not require a substantial amount of additional water. Water for fire suppression will be provided pursuant to existing labor and industry permits. Dubois pf. at 30.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

34. The Project will not cause an adverse impact on soil erosion. The sitework for the Project will be located within the farmstead, in a relatively flat area, and the existing topography will not be altered. Dubois pf. at 26, 30; DF-BD-1, 2, and 3.

**Transportation Systems**

[10 V.S.A. § 6086(a)(5)]

35. The Project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. The Project will convert raw manure into biosolids for bedding, thereby reducing the importation of sawdust for bedding by approximately eighty-five percent. The Project may transport biosolids, but expects that most of the biosolids will be used on the farm as bedding or fertilizer. Dubois pf. at 15, 31.

**Discussion**

If Dubois Farm sells and transports biosolids, the Board limits the exportation of biosolids to one truckload per day. If Dubois Farm imports off-farm feedstock, the Board limits the importation of off-farm feedstock to one truckload per day. Thus, the Project is limited to two round-trip truck trips per day.

**Educational Services**

[10 V.S.A. §§ 6086(a)(6)]

36. The Project will not cause an unreasonable burden on educational services. Dubois pf. at 31.

**Municipal Services**

[10 V.S.A. §§ 6086(a)(7)]

37. The Project will not require any municipal or governmental services. Dubois pf. at 31-32.

**Aesthetics, Historic Sites  
and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

38. The Project will not have an undue adverse impact on the scenic or natural beauty, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 38 through 40, below.

39. The Project is designed to be consistent in appearance and color with existing structures and will be constructed entirely on the Farm property, within the existing farmstead complex, and immediately adjacent to existing farm buildings. Dubois pf. at 25-26, 32-33; exhs. DF-BD-2, 3, and 4.

40. The Project does not involve installation of new utility poles. The electrical cable connecting the generator to CVPS's distribution system will be buried from the generator building to an existing utility pole. Dubois pf. at 6, 9, 26.

41. There are no historic sites or rare and irreplaceable natural areas in the vicinity of the proposed project. Dubois pf. at 27, 34.

**Necessary Wildlife Habitat and Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

42. The Project will not have any adverse impacts on wildlife habitat or threatened or endangered species. Dubois pf. at 34.

**Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

43. The Project will not unnecessarily or unreasonably endanger any public or quasi-public investment or materially jeopardize or interfere with the public's use or enjoyment of or access to public lands or services. The only public investment near the Project is Route 17E, the road from which the Farm is accessed. The Project will not be visible from the road and will not adversely affect the use of this road by the public. Dubois pf. at 27, 34.

**Least-Cost Integrated Resource Plan**

[30 V.S.A. § 248(b)(6)]

44. Dubois Farm does not distribute or transmit electricity to the public and is not required to prepare an integrated resource plan pursuant to 30 V.S.A. § 218c.

**Compliance with Electric Energy Plan**

[30 V.S.A. § 248(b)(7)]

45. On March 1, 2010, the Department filed a letter stating that the Department found Dubois Farm's petition consistent with the *Vermont Electric Plan*, pursuant to 30 V.S.A. § 202(f). Letter of March 1, 2010, from Sarah Hofmann, Esq., to Susan M. Hudson, Clerk of the Board.

**Outstanding Resource Waters**

[30 V.S.A. § 248(b)(8)]

46. The Project is not located near any outstanding resource waters. Dubois pf. at 28.

**Existing or Planned Transmission Facilities**

[30 V.S.A. § 248(b)(10)]

47. The Project, with the development of an appropriate interconnection agreement, can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. Dubois pf. at 36; exhs. DF-BD-10 and 13.

#### IV. CONCLUSION

Based upon all of the above evidence, we conclude that the proposed project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

#### V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The proposed installation and operation of a 450-kW agricultural-methane electrical generating facility at a dairy farm owned by Dubois Farm, Inc., located at 2038 Route 17E in Addison, Vermont (the "Project"), will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued.
2. The Project shall be constructed in accordance with the evidence and plans submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
3. Dubois Farm shall comply with the recommendations contained in the System Impact Study ("SIS") to assure that the Project does not cause undue adverse impacts on system stability and reliability. Dubois Farm shall pay for all costs associated with the recommendations in the SIS, as well as all interconnection costs.
4. Prior to operation of the Project, Dubois Farm shall enter into an interconnection agreement with Central Vermont Public Service Corporation ("CVPS") and file the agreement with the Public Service Board ("Board") and the Department of Public Service ("Department").
5. Prior to interconnection of the generator with the CVPS system, Dubois Farm shall provide the Board and the Department with written documentation that the Project meets the applicable codes and standards listed in PSB Rule 5.510.

6. Dubois Farm shall comply with the four conditions for operating the engine and the flare established by the Air Pollution Control Division of the Agency of Natural Resources ("ANR") in a letter dated April 29, 2009.

7. Dubois Farm shall obtain all necessary permits and approvals and comply with any conditions that the permits or approvals might contain.

8. If Dubois Farm intends to use or store any off-site resources for this project, it shall: notify the Board, ANR, and AAFM and file, for Board approval, a plan for handling and storing off-farm feedstock; obtain all necessary permits or approvals required by ANR and AAFM; and load semi-solid feedstock into the digester hopper, and feed it into the digester tanks, on the same day as delivery, in order to eliminate the need for on-site storage and minimize potential odors.

9. If Dubois Farm utilizes off-farm feedstock, at least fifty-one percent of feedstock shall be derived from agricultural operations, produced for some other purpose than solely that of providing a fuel source for generation. Dubois Farms must also keep accurate records of the quantity of each type of feedstock utilized in the digester and report these quantities to the Board annually by March 31 of the following year.

10. If Dubois Farm sells and transports biosolids, it must notify the Board and parties prior to commencing the export of biosolids off of the Farm.

11. Prior to construction, Dubois Farm must file, for Board approval, a letter providing the dimensions of the digester.

Dated at Montpelier, Vermont this 13th day of May, 2010.

s/ James Volz )

) PUBLIC SERVICE

s/ David C. Coen )

) BOARD

s/ John D. Burke )

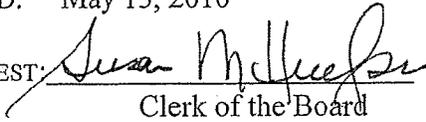
) OF VERMONT

A true copy:

OFFICE OF THE CLERK

FILED: May 13, 2010

ATTEST:

  
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.*

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7584

Petition of Dubois Farm, Inc. and Dubois Energy, )  
LLC ("Dubois Farm") for a Certificate of Public )  
Good, pursuant to 30 V.S.A. Section 248(j), )  
authorizing the installation and operation of a 450- )  
kW agricultural-methane electrical generating )  
facility at a dairy farm owned by Dubois Farm, Inc., )  
located at 2038 Route 17E in Addison, Vermont )

Entered:

5/13/2020

**CERTIFICATE OF PUBLIC GOOD ISSUED**  
**PURSUANT TO 30 V.S.A. SECTION 248**

IT IS HEREBY CERTIFIED that the Public Service Board ("Board") of the State of Vermont this day found and adjudged that the proposed installation and operation of a 450-kW agricultural-methane electrical generating facility at a dairy farm owned by Dubois Farm, Inc., located at 2038 Route 17E in Addison, Vermont (the "Project"), in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State, subject to the following conditions:

1. The Project shall be constructed in accordance with the evidence and plans submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
2. Dubois Farm shall comply with the recommendations contained in the System Impact Study ("SIS") and the final report by Nova Energy Specialists, LLC ("Nova") to assure that the Project does not cause undue adverse impacts on system stability and reliability. Dubois Farm shall pay for all costs associated with the recommendations in the SIS and the Nova report as well as all interconnection costs.
3. Prior to operation of the Project, Dubois Farm shall enter into an interconnection agreement with Central Vermont Public Service Corporation ("CVPS") and file the agreement with the Board and the Department of Public Service ("Department").

4. Prior to interconnection of the generator with the CVPS system, Dubois Farm shall provide the Board and the Department with written documentation that the Project meets the applicable codes and standards listed in PSB Rule 5.510.
5. Dubois Farm shall comply with the four conditions for operating the engine and the flare established by the Air Pollution Control Division of the Agency of Natural Resources ("ANR") in a letter dated April 29, 2009.
6. Dubois Farm shall obtain all necessary permits and approvals and comply with any conditions that the permits or approvals might contain.
7. If Dubois Farm intends to use or store any off-farm resources for the Project, it shall notify the Board, ANR and the Agency of Agriculture, Food and Markets ("AAFM") and file, for Board approval, a plan for handling and storing off-farm feedstock; obtain all necessary permits or approvals required by both ANR and AAFM; and load all semi-solid feedstock into the digester hopper, and feed it into the digester tanks, on the same day as delivery, in order to eliminate the need for on-site storage and minimize potential odors.
8. If Dubois Farm utilizes off-farm feedstock, at least fifty-one percent of feedstock shall be derived from agricultural operations, produced for some other purpose than solely that of providing a fuel source for generation. Dubois Farms must also keep accurate records of the quantity of each type of feedstock utilized in the digester and report these quantities to the Board annually by March 31 of the following year.
9. If Dubois Farm sells and transports biosolids, it must notify the Board and parties prior to commencing the export of biosolids off of the farm.
10. Prior to construction, Dubois Farm must file, for Board approval, a letter providing the dimensions of the digester.

DATED at Montpelier, Vermont, this 13th day of May, 2010.

s/ James Volz )

PUBLIC SERVICE

s/ David C. Coen )

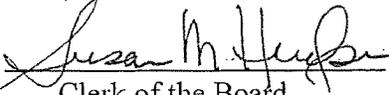
BOARD

s/ John D. Burke )

OF VERMONT

A TRUE COPY:  
OFFICE OF THE CLERK

Filed: May 13, 2010

Attest:   
Clerk of the Board

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