



DE 13-316

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NHPUC 4NOV13AM11:48

October 31, 2013

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

Re: Chaput Family Farms REC Application

Dear Ms. Howland:

Enclosed, please find an Application for RPS Qualification on behalf of Chaput Family Farms, which owns and operates a behind the meter methane fueled electrical generating facility in North Troy, VT.

Included with this submission is the application form, the interconnection agreement, the Certificate of Public Good from Vermont Public Service Board, the REC approval letter from Connecticut, and an attachment addressing the narrative questions and an affidavit by the owner of the farm attesting to the accuracy of the application and authorizing Green Mountain Power to submit this application on the Farm's behalf.

Should you have questions concerning this submission or if you need any additional information, please do not hesitate to contact me.

Respectfully submitted,

A handwritten signature in black ink that reads "Maria R. Fischer".

Maria R. Fischer

(2)

North Troy VT 5859
(City) (State) (Zip code)

9. Latitude: 45 Longitude: -72

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

Reg Chaput 802-722-4017
(Name) (Telephone number)

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

12. The GIS facility code, if applicable: Non-32976 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.

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.
- 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: Maria Fischer

Title: Power Supply Analyst

Address: (1) 163 Acorn Lane

(2) _____

(3) _____

Colchester

(City)

VT

(State)

05446

(Zip code)

30. Preparer's signature:

Maria R. Jansen

Chaput Family Farms
NH Class I REC Application

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

Chaput Family Farms is a 300kW farm methane fueled generating station located in North Troy, Vermont. The unit began operation on 8/3/2010, which was the initial commercial operation date.

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.

Attached, please find the Certificate of Public Good, issued by the Vermont Public Service Board on September 18, 2009.

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

The Project is interconnected with Vermont Electrical Cooperative distribution system. Please see the attached interconnection agreement.

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

Chaput Family Farms is certified as a Class I resource in Connecticut. Attached is the approval letter.

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

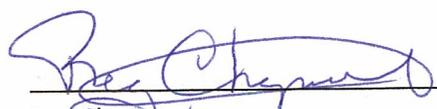
The output of Chaput Family Farms is not verified by ISO-NE.

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

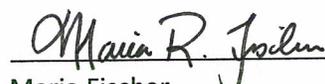
VELCO is the third-party meter reader who reports generation to NEPOOL GIS on a quarterly basis.

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

Chaput Family Farms attests that all the information contained in this application is accurate. Green Mountain Power has the authority to submit this application and represent Chaput Family Farms on all matters related to the State of New Hampshire renewable energy source eligibility.



Reg Chaput
Chaput Family Farms
Owner of Facility



Maria Fischer
Green Mountain Power
Applicant and Authorized Representative



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC UTILITY CONTROL
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 09-12-09 APPLICATION OF CHAPUT FAMILY FARMS FOR A
DECLARATORY RULING FOR AGRICULTURAL
METHANE FACILITY

May 5, 2010

By the following Commissioners:

Anthony J. Palermino
Amalia Vazquez Bzdyra
Kevin M. DelGobbo

DECISION

I. INTRODUCTION

A. SUMMARY

By Petition dated December 11, 2009, pursuant to the General Statutes of Connecticut (Conn. Gen. Stat.) § 4-176 and the Regulations of Connecticut State Agencies §§ 16-1-113, et seq., Chaput Family Farms (CFF or Applicant) requested that the Department of Public Utility Control (Department) issue a declaratory ruling that the proposed development of a 0.30 MW agricultural methane electrical generating facility that is to be located in North Troy, Vermont would qualify as a Class I Renewable Energy Source as defined in Conn. Gen. Stat. § 16-1(a)(26).

II. PETITIONER'S EVIDENCE

CFF proposes to construct a 0.30 MW agricultural methane on-site generating facility (Project). Pursuant to Conn. Gen. Stat. § 16-1-113 et. Seq., CFF requests that the Department issue a declaratory ruling determining that the Project, as proposed, would qualify as a Class I Renewable Energy Source within the meaning of Conn. Gen. Stat. § 16-1(a)(26) as an energy derived from "methane gas from landfills."

The proposed Project will be located on Route 5, in North Troy, Vermont, the location of CFF's dairy farm. The Project will be constructed within the existing farmstead.

The Project will consist of the following components:

1. A circular concrete manure digester tank, 98 feet in diameter and 16 feet high.
2. A 30' x 50' utility building and a 40' x 70' building to house a separator and for storage of post-digester solids.
3. An effluent tank and two scrubber tanks.
4. One new power pole.
5. A Guascor MGG-475 combustion engine designed specifically to burn biogas.
6. A 300 kW generator.
7. Interconnection hardware to connect the generator to the grid.

The Project will interconnect with Vermont Electrical Cooperative distribution system.

The digester will hold various types of substrate, but mostly unprocessed cow manure from the farm. The substrate will be pumped directly from a receiving pit into the enclosed digester, where it will be mixed and heated to a temperature of about 100°F. In a two-stage process lasting about 24 days from start to finish, the degradation of the substrate will produce methane biogas and biosolids. The methane will be collected and used to fuel the engine, which will run the generator set and produce electricity. 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 used for farm and commercial functions. CFF hopes to be able to use most of it as bedding for its cows, realizing considerable savings on sawdust. One environmental advantage to reducing the use of sawdust for bedding is that this should reduce CFF's total phosphorous import. The liquid waste will be spread on the fields as fertilizer, with the advantage that much of the organic nitrogen will have been converted to ammonia during the digestion process, so the liquid will be better for crops and less of an environmental hazard. There will also be an avoidance of lagoon methane which would otherwise be released into the atmosphere as a greenhouse gas which is twenty times more powerful than carbon dioxide. Application, p. 2.

The digester will hold various types of methane-producing substrates. CFF intends to primarily use manure produced on the farm, and other materials, both on-farm and off-farm, depending on needs and availability of such additional materials. The most likely substrates, in addition to manure produced on the farm, would be manure from other farms, including manure from farm animals besides cows; waste grain; food waste; waste dairy products (such as whey); and waste crops or crops grown specifically to use in the digester. These substrates would all be "agricultural-based," meaning any material in raw or processed form which originates from a farming operation in 10 V.S.A. § 6001(22)(A)(B)(C)(D), and which is consumed at a harvest rate at or below its natural regeneration rate. Specifically included in this definition are examples cited above. Id., pp. 2 and 3.

According to the Applicant, the Project is most analogous to the category "methane gas from landfills." The fuel (methane gas) is the same. CFF states that the only difference is the organic matter used to produce the methane gas; however, in either case the organic matter is waste. The Applicant contends that a farm-based methane plant offers greater environmental benefits than a landfill-methane plant because of the added value of converting manure from a pathogen-rich to a pathogen-free substance, while at the same time preserving its nutrients, so that it can still be spread as fertilizer yet without the danger of leachate causing harm to ground or surface waters, and without the accompanying odor when the manure is spread. In addition, use of the digested solids as bedding will replace sawdust as bedding, reducing the farm's total phosphorous load and reducing trucking of large amounts of sawdust to and from the farm. CFF states that these benefits of the Project are far greater than the benefits derived from a simple landfill methane operation, which captures methane, yet offers fewer ancillary environmental benefits. Application, p. 3.

CFF provided a copy of the Petition of Chaput Family Farms for a Declaratory Ruling for Qualification of CFF as a Class I Renewable Energy Source, approved by the State of Vermont, dated September 18, 2009, and the Power Purchase Agreement between CFF and the Vermont Sustainable Priced Energy Development (SPEED) facilitator, VEPP, Inc., dated December 17 and 23, 2009, documenting that the CFF Project meets the qualifications to sell its output through the SPEED program.¹ Late Filed Exhibit Nos. 1 and 2.

¹ CFF also provided a copy of Vermont Statutes Annotated (V.S.A.) §§ 8005 and 8001, which describes the Vermont SPEED program.

III. DEPARTMENT ANALYSIS

A. LEGAL STANDARDS

Conn. Gen. Stat. § 16-1(a)(26), defines a Class I renewable energy source as:

(A) energy derived from solar power, wind power, a fuel cell, **methane gas from landfills**, ocean thermal power, wave or tidal power, low emission advanced renewable energy conversion technologies, a run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation after July 1, 2003, **or a sustainable biomass facility with an average emission rate of equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, except that energy derived from a sustainable biomass facility with a capacity of less than five hundred kilowatts that began construction before July 1, 2003, may be considered a Class I renewable energy source**, or (B) any electrical generation, including distributed generation, generated from a Class I renewable energy source. (Emphasis added).

Further, sustainable biomass as defined in Conn. Gen. Stat. § 16-1(a)(45):

means **biomass that is cultivated and harvested in a sustainable manner. “Sustainable biomass” does not mean construction and demolition waste as defined in section 22a-208x, finished biomass products from sawmills, paper mills or stud mills, organic refuse fuel derived separately from municipal solid waste, or biomass from old growth timber stands** (Emphasis added).

B. NO_x EMISSIONS

CFF states that the Project's NO_x annual emissions are estimated to exceed five tons if the engine is operated for more than 1700 hours per year. Currently, CFF has no plans or protocol in place to measure and report emissions. Response to Interrogatory No. EL-5. CFF indicated that the Project is not capable of meeting the NO_x requirement as a Class I biomass facility and is requesting qualification as a methane gas from landfill facility. Because of its NO_x emissions, CFF has requested RPS qualification as a “methane gas from landfill” facility, a category that does not require compliance with NO_x emission standards established in Conn. Gen. Stat. § 16-1(a)(26) and Section 22a-174-22(e) of the Regulations of State Agencies. Response to Interrogatory No. EL-6.

C. METHANE GAS FROM LANDFILLS

Conn. Gen. Stat. 16-1(a)(26) does not include a definition that specifically qualifies methane gas from agricultural waste as a Class I energy source.

CFF states that its proposed project creates energy utilizing technology that is most closely related to the “methane gas from landfills” statutory definition of Class I energy source. Manure and organic waste will be placed into an anaerobic digester where it will be allowed to decompose under anaerobic conditions. The methane gas given off by the decomposing manure and organic waste will be captured and used as the primary fuel for the 150 kW generator. Application, p. 3; Response to Interrogatory EL-7.

Virtually all of the fuel source will be manure and organic waste. CFF’s 950 mature cows and 400 heifers will generate approximately 19,300 gallons of manure per day. In addition, CFF may use organic waste such as waste grain, pre-consumer food waste, waste dairy products and waste crops or crops grown specifically to use in the digester. CFF may also use animal manure from other farms. CFF cannot make any representations as to the specific percentage from each type of substrate. Response to Interrogatories EL-2 and EL-4.

The Project will use manure as the start-up fuel. However, the initial batch of manure must be heated with a fossil fuel until the system produces enough biogas to run the engine and thereby become self-sustaining as a heat source for the digester. Once the manure is heated and biogas is produced, the biogas will power the engine that will drive the generator, which will generate waste heat that will be passed back through into the digester to maintain the digester temperature. Response to Interrogatory EL-3.

In Docket 07-06-22, the Department determined that Cushman dairy farm project, which would generate electricity from farm manure and organic waste would qualify as a Class I energy source as a facility utilizing methane gas from a landfill. In that Decision, the Department stated:

The commonly accepted definition of a landfill is “[a] method of waste disposal in which garbage and trash are buried in low lying ground.”² The manure and organic wastes used by Cushman are certainly within the realm of garbage and trash, which are simply waste materials. The Cushman project will combust methane, which is released from the organic decomposition process, to produce electricity. This is the same mechanism whereby municipal landfill methane based generators derive their fuel source; the only difference is that, in Cushman’s case, the waste material is not buried. While this is a variation on the traditional definition of landfill, the Department does not believe that it is a material difference. Rather, the material facts are that methane is the ultimate fuel source for

² Webster’s New College Dictionary.

the facility, and that methane is produced by the decomposition of organic waste material.

As in Docket 07-06-22, in the instant Docket, the Department concludes that since the CFF facility utilizes the same process to produce energy using methane gas as is utilized by a landfill, it qualifies as a Class I renewable energy source.

The Department has created an electronic application process for generation owners to apply for a Connecticut Renewable Portfolio Standards registration. The application is available on the Department's website @ <http://www.dpuc.state.ct.us/CTRPSGeneratorApplication.nsf>. The application should be submitted electronically along with a single hard-copy filing. In the application, include a reference to the instant docket that indicates that this project was approved before becoming operational. While the Department concludes in this Decision that the CFF Project would qualify as a Class I renewable energy source pursuant to Conn. Gen. Stat. 16-1(26), the Applicant must still apply for registration in the aforementioned system once operational and registered in the New England Generation Information System.

V. CONCLUSION

Based upon the project as described herein, the Department finds that, as proposed, the CFF Project would qualify as a Class I renewable energy source for energy derived from landfill methane gas.

**DOCKET NO. 09-12-09 APPLICATION OF CHAPUT FAMILY FARMS FOR A
DECLARATORY RULING FOR AGRICULTURAL
METHANE FACILITY**

This Decision is adopted by the following Commissioners:

Anthony J. Palermino

Amalia Vazquez Bzdyra

Kevin M. DelGobbo

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Department of Public Utility Control, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



Kimberley J. Santopietro
Executive Secretary
Department of Public Utility Control

May 7, 2010

Date

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7542

Petition of Chaput Family Farms ("the Chaputs"))
for a Certificate of Public Good, pursuant to)
30 V.S.A. Section 248(j), authorizing the)
installation and operation of a farm-based)
methane-fueled electrical generating facility at the)
Chaput Family Farm located on Route 105 in)
North Troy, Vermont)

Order entered:

9/18/2009

I. INTRODUCTION

This case involves a petition filed by Chaput Family Farms ("the Chaputs") requesting a certificate of public good under 30 V.S.A. § 248(j) to install and operate a farm-based methane-fueled electrical generating facility at the Chaput Family Farms located in North Troy, 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 June 15, 2009, the Chaputs 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 farm-based methane-fueled electrical generating facility at the Chaput Family Farm located on Route 105 in North Troy, Vermont. The generating facility would be interconnected with Vermont Electric Cooperative, Inc.'s ("VEC") distribution system. The Chaputs submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

Notice of the petition was sent on July 30, 2009, 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 August 31,

2009. A similar notice of the filing was published in *The Newport Daily Express* on August 3, 2009, and August 10, 2009.

In a July 30, 2009, memorandum, the Board requested additional information. On August 19, 2009, the Chaputs filed a letter in response to that request.¹ In that filing, the Chaputs made a modification to the prefiled testimony of Reg Chaput, with regard to how the farm intends to sell the energy to be generated on the farm.

On August 28, 2009, 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 Section 248 and a certificate of public good should be issued. On September 2, 2009, the Agency of Natural Resources ("ANR") filed notice with the Board that it had no comments on the petition.

III. FINDINGS

1. The petitioner is a family farm owned by members of the Chaput family located on Route 105 in North Troy, Vermont. The petitioner is a partnership as defined by 30 V.S.A. § 201, and is subject to the Board's jurisdiction. Petition at 1; Chaput pf. at 1-2.
2. The proposed project will involve the construction of an enclosed, concrete anaerobic digester vessel to convert raw manure and other agricultural-based substrates, from sources on- and off-site, into methane gas, nutrient rich liquids, and clean solids. The liquid will be spread as fertilizer, and the solids used as bedding for cows. The methane produced will be used to fuel a 300 kW generator to produce electricity. Chaput pf. at 3-4.
3. The proposed digester will primarily use manure produced on the farm. Other digester substrates may include manure from other farms, waste grain, food waste, waste dairy products, and waste crops or crops grown specifically to use in the digester. The proposed project will involve the importation of up to ten truckloads of off-farm substrate per month. Chaput pf. at 3-4, and 10.

1. August 19, 2009, letter from Ebenezer Punderson, Esq., on behalf of the Chaputs to Susan M. Hudson, Clerk of the Board ("Chaput letter").

4. The proposed project will include the construction of an enclosed, circular, concrete manure digester tank with insulated floating cover, 98 feet in diameter and 16 feet in height. The proposed construction will include a new utility building to house the generating equipment, constructed as an addition, with dimensions of 30 feet by 50 feet, off the side of an existing shop. A second building to house a separator and store separated solids is proposed to be constructed near the digester, with a dimension of 40 feet by 70 feet. An effluent tank, about 12 feet by 12 feet, and two scrubber tanks, about 6 feet in diameter, are also proposed to be constructed next to the digester. Chaput pf. at 2; exhs. A and B.

5. An existing distribution line on Route 105 will be upgraded by VEC for the proposed project. VEC will rebuild approximately 2,300 feet of existing single-phase line to three-phase line. No modifications to the existing poles will be made, except the addition of crossarms and two phase wires. Denis pf. at 2 and 4.

6. VEC will install approximately 100 feet of three-phase 12.47 kV underground line on the Chaput property, beginning at the end of the upgraded line on Route 105 and ending at the pad-mounted generator step-up transformer. One new pole, less than 5 feet taller than the existing distribution poles, will be installed on Route 105 at the start of the underground line. This pole will support an electronic line recloser, a load-break switch, and the conduit risers to connect the underground system. The recloser will be controlled from VEC's dispatch center in Johnson by a supervisory controlled and data acquisition system. Denis pf. at 2; Chaput letter at 1.

7. The proposed project is intended to be a Sustainably Priced Energy Enterprise Development ("SPEED") resource so that it may qualify to sell the power at the standard offer prices under 30 V.S.A. § 8005(b)(2). The proposed project's environmental attributes, distinct from the electrical output, will be sold under a separate agreement to Central Vermont Public Service Corporation ("CVPS"). Chaput pf. at 4; Chaput letter at 2.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

8. The proposed 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 proposed project will be on farm property owned by the Chaputs in a location that will be compatible with other nearby large farm buildings. Chaput pf. at 2.

10. The Troy Planning Commission has endorsed the proposed project as being consistent with the Troy Town Plan. The Northeastern Vermont Development Association has endorsed the proposed project as conforming to the Northeastern Regional Plan. Chaput pf. at 5.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

11. The proposed project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 12 through 14, below.

12. The proposed project is intended to be a SPEED resource so that it may sell the power to meet the regional need for electricity. Chaput pf. at 5; Chaput letter at 2.

13. The renewable energy attributes associated with the electrical output of the proposed project will be sold to CVPS as part of the utility's voluntary renewable pricing program under its Cow Power Program. Chaput pf. at 5.

14. The State of Vermont, as a matter of public policy, encourages development of renewable energy sources. Chaput pf. at 5.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

15. The proposed project will not adversely affect system stability and reliability. This finding is supported by findings 16 and 17, below.

16. The proposed project will be interconnected at 12.47 kV with a VEC distribution system that originates at VEC's North Troy substation. A system impact study indicates, with the improvements set forth in the study, the proposed project will not have any undue adverse impacts on system stability or reliability. Chaput pf. at 5; exh. E; Chaput letter at attachment 1.

17. The system impact study for the proposed project identifies twelve additional analyses and upgrades that are required to assure that the operation of the new generators at the Chaput facility do not have any undue adverse impacts on system stability and reliability. The Chaputs propose that the additional analyses and upgrades be imposed as conditions to the certificate of public good. Chaput pf. at 5-7; exh. E at 13; Chaput letter at attachment 1.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

18. The proposed project will have an economic benefit to the State by providing renewable in-state generation, enhancing the State's energy diversity. The proposed project will enhance the economic viability of the Chaput farm and all the ancillary services associated with the farm. Chaput pf. at 7.

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

[30 V.S.A. § 248(b)(5)]

19. 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 20 through 45, 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)]

20. The proposed project will not be located on or anywhere near any segment of any outstanding resource waters of the State. Chaput pf. at 8.

Air Pollution

[10 V.S.A. § 6086(a)(1)]

21. The proposed project will not result in undue air pollution. This finding is supported by findings 22 through 25, below.

22. In a letter dated April 29, 2009, the Air Pollution Control Division of ANR has determined that the engine, back-up flare, and exhaust-stack configuration for the proposed project meet ANR requirements and do not require an Air Pollution Control Permit. ANR has imposed four conditions for operating the engine and the flare as part of that determination. Chaput pf. at 8; exh. F.

23. The proposed project will greatly reduce pathogens and odor in the farm manure through the digestion process, and result in the reduction of the release of greenhouse gases through the use of the methane to generate power. Chaput pf. at 3 and 7.

24. The proposed project will include a new utility building to house the reciprocating engine and generating equipment, minimizing noise. Chaput pf. at 2-3 and 9.

25. The construction of the proposed project will require limited earth disturbance and will not involve excessive dust, smoke, odors, or noise. Denis pf. at 3.

Water Pollution

[10 V.S.A. § 6086(a)(1)]

26. The proposed project will not result in undue water pollution. This finding is supported by finding 27 and by the specific findings under the criteria of 10 V.S.A. §§ 6086(a)(1)(A) through (G), below.

27. The proposed project, through the digestion process, will enable the conversion of raw manure into a liquid waste that results in an ammonia-rich fertilizer that is more readily absorbed by crops improving the quality of the runoff from the farm fields. Chaput pf. at 3 and 8.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

28. The proposed project is not located in a headwaters area. Chaput pf. at 9; Denis pf. at 3.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

29. The proposed project will meet applicable health and environmental conservation regulations regarding the disposal of wastes. Any wastes produced during construction will be disposed of in an approved landfill. The proposed project will result in the improved treatment of farm manure waste. Chaput pf. at 9; Denis pf. at 3.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

30. The proposed project will not require a new water supply and will not have an impact on existing water use. Chaput pf. at 9.

Floodways

[10 V.S.A. §§ 6086(a)(1)(D)]

31. The proposed project is not located within a floodway or floodway fringe. Chaput pf. at 9; exh. G.

Streams

[10 V.S.A. §§ 6086(a)(1)(E)]

32. The proposed project will have no impact on streams, since no improvements will be located on the banks of a stream. Chaput pf. at 9; Denis pf. at 3.

Shorelines

[10 V.S.A. §§ 6086(a)(1)(F)]

33. The proposed project is not located near a shoreline. Chaput pf. at 9-10; Denis pf. at 3.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

34. The proposed project will not impact wetlands. There are wetlands located on the farm property but no development or farm operations associated with the proposed project will occur on or in the vicinity of the wetlands. Chaput pf. at 10; Denis pf. at 3.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

35. The proposed project will not require the use of additional water and therefore will not place a burden on the existing water supply. Chaput pf. at 10.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

36. The proposed project will not cause an adverse impact on soil erosion. The sitework for the proposed project will be located within the farmstead, in a relatively flat area, and the existing topography will not be altered. Any soil disturbance will be limited to the farmstead complex, the placement of a new utility pole, and installation of 100 feet of underground distribution line. Chaput pf. at 10; Denis pf. at 4.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

37. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. If the proposed digester only uses manure from the farm, there will be a net decrease in the truck deliveries to the farm resulting from the avoidance of sawdust

bedding imports. If all the substrate for the digester is imported and the sawdust deliveries are eliminated, there will be a net increase of four truck deliveries per month, about a five percent increase in truck traffic to the farm. The proposed project will involve the importation of up to ten truckloads of off-farm substrate per month. Chaput pf. at 10-11; Denis pf. at 4.

Educational Services

[10 V.S.A. §§ 6086(a)(6)]

38. The proposed project will not cause an unreasonable burden on educational services. Chaput pf. at 11.

Municipal Services

[10 V.S.A. §§ 6086(a)(7)]

39. The proposed project will not cause an unreasonable burden on municipal services. Chaput pf. at 11.

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

[10 V.S.A. § 6086(a)(8)]

40. The proposed 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 41 through 43, below.

41. All of the proposed project improvements are to be located within an existing farmstead, and the new buildings will be compatible in design and appearance with the existing farm buildings. Chaput pf. at 2-3 and 11.

42. The proposed distribution line upgrade will include the addition of crossarms and two phase wires and one new pole. No other modifications will be made to the existing poles. Thus, the changes in appearance of the distribution line will be minimal. Denis pf. at 2 and 4.

43. There are no known archeological or historic sites or rare and irreplaceable natural areas in the vicinity of the proposed project. Denis pf. at 4-5.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

44. The proposed project will not have any adverse impacts on wildlife habitats or threatened or endangered species. There are no known endangered species within the proposed project area. Chaput pf. at 11; Denis pf. at 5.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

45. The proposed project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of the public's use or enjoyment of or access to such facilities, services, or lands. There are no public lands in the vicinity of the proposed project, except for Route 105 which will not be adversely affected by the proposed project. Chaput pf. at 11-12; Denis pf. at 4.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

46. The Chaputs do not distribute or transmit electricity to the public and are not required to prepare an integrated resource plan pursuant to 30 V.S.A. § 218c. Chaput pf. at 12.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

47. The proposed project is consistent with the *Vermont Electric Plan* because it fulfills the need for electric service that is "carefully balanced" between the following goals: "efficient, adequate, reliable, secure, sustainable, affordable, safe and environmentally sound, while encouraging the state's economic vitality and maintaining consistency with other state policies." Chaput pf. at 12.

48. The Department filed a determination on September 4, 2009, that the proposed project is consistent with the *Vermont Electric Plan*, in accordance with 30 V.S.A. § 202(f).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

49. The proposed project will not be located on or anywhere near any segment of any outstanding resource waters. Chaput pf. at 13.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

50. The proposed project can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. Chaput pf. at 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 farm-based methane-fueled electrical generating facility at the Chaput Family Farms located on Route 105 in North Troy, Vermont, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good to that effect shall be issued.

2. Construction shall be in be in accordance with the plans as submitted in these proceedings. Any material deviation from these plans must be approved by the Board.

3. The Chaput Family Farms shall complete the twelve additional analyses and upgrades that the system impact study for the proposed project identified as necessary to assure that the operation of the new generators to not have any undue adverse impacts on system stability and reliability.

4. The Chaput Family Farms shall pay the entire cost of the distribution system upgrades.

5. The Chaput Family Farms 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 in a letter dated April 29, 2009.

6. Truck deliveries to the Chaput Family Farms shall include no more than ten truckloads per month of agricultural-based substrate for use in the farm digester.

Dated at Montpelier, Vermont this 18th day of September, 2009.

s/James Volz)

) PUBLIC SERVICE

s/David C. Coen)

) BOARD

s/John D. Burke)

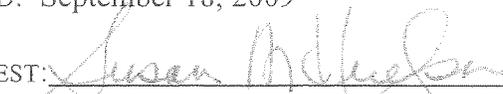
) OF VERMONT

A true copy:

OFFICE OF THE CLERK

FILED: September 18, 2009

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. 7542

Petition of Chaput Family Farms ("the Chaputs") for)
a Certificate of Public Good, pursuant to 30 V.S.A.)
Section 248(j), authorizing the installation and)
operation of a farm-based methane-fueled electrical)
generating facility at the Chaput Family Farm located)
on Route 105 in North Troy, Vermont)

Entered: 9/18/2009

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

IT IS HEREBY CERTIFIED that the Public Service Board of the State of Vermont this day found and adjudged that the proposed installation and operation of a farm-based methane-fueled electrical generating facility at the Chaput Family Farms located on Route 105 in North Troy, Vermont, by the Chaput Family Farms, 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. Construction, operation, and maintenance of the project shall be in accordance with the plans and evidence submitted in this proceeding. Any material deviation from these plans must be approved by the Board.
2. The Chaput Family Farms shall complete the twelve additional analyses and upgrades that the system impact study for the proposed project identified as necessary to assure that the operation of the new generators to not have any undue adverse impacts on system stability and reliability.
3. The Chaput Family Farms shall pay the entire cost of the distribution system upgrades.
4. The Chaput Family Farms 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 in a letter dated April 29, 2009.
5. Truck deliveries to the Chaput Family Farms shall include no more than ten truckloads per month of agricultural-based substrate for use in the farm digester.
6. This Certificate of Public Good shall not be transferred without prior approval of the Board.

DATED at Montpelier, Vermont, this 18th day of September, 2009.

s/James Volz)

) PUBLIC SERVICE

s/David C. Coen)

) BOARD

s/John D. Burke)

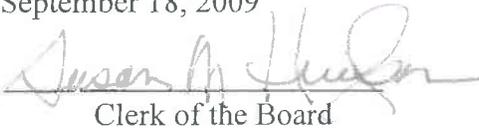
) OF VERMONT

A true copy:

OFFICE OF THE CLERK

Filed: September 18, 2009

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)

GENERATION INTERCONNECTION AGREEMENT

BETWEEN

VERMONT ELECTRIC COOPERATIVE, INC.

AND

CHAPUT FAMILY FARMS

FOR THE

CHAPUT FAMILY FARMS

COW-METHANE ELECTRIC GENERATION PROJECT

The purpose of this Agreement is to allow the operation of electrical generation facilities interconnected with and operated in parallel with VERMONT ELECTRIC COOPERATIVE'S electrical system.

Effective Date: July 26, 2010.

VERMONT ELECTRIC COOPERATIVE
GENERATION INTERCONNECTION AGREEMENT
CHAPUT FAMILY FARMS COW-METHANE ELECTRIC GENERATION PROJECT

This AGREEMENT (“Agreement”) made as of July 26, 2010 (“Effective Date”), by and between VERMONT ELECTRIC COOPERATIVE, INC. (“VEC”), a consumer owned not-for-profit electric utility incorporated in Vermont, and CHAPUT FAMILY FARMS (“CFF”), a retail electric customer of VEC (individually a “Party” and together the “Parties”).

WITNESSETH:

WHEREAS, CFF proposes to own and operate an approximately 375 kVA (300 kW) synchronous electric generating facility located at 2473 VT Route 105 East, in the Town of Troy, Vermont (the “Farm-Methane-Generation Facility” or “Project”), for the purpose of generating electric power; and

WHEREAS, under the terms contained in this Agreement CFF desires to operate the Farm-Methane-Generation Facility interconnected in parallel with VEC's electric system;

WHEREAS, the Project utilizes the anaerobic digestion of agricultural products, byproducts, or wastes to produce electricity; and

WHEREAS, CFF desires that the Project’s electric output be sold pursuant to the Standard-Offer Program¹.

1. DEFINITIONS

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

- a. Interconnection Point shall be the point where VEC’s distribution system connects with CFF’s Project to allow the Project’s generation equipment to operate interconnected in parallel with the VEC electric system. This point is defined as the generation output terminal connections, on the generator side of the lockable load break three phase gang switch, labeled 3F6X, located on the primary riser pole at Chaput Farm, 2473 VT Route 105 East, North Troy, Vermont.
- 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

¹ The Project will participate in the Standard-Offer Program for Qualifying Sustainably Priced Energy Enterprise Development (“SPEED”) Resources pursuant to Vermont Act 45, in accordance with the requirements established by the Vermont Public Service Board.

respect to the Project, Prudent Engineering and Operating Practices include but are not limited to taking reasonable steps to ensure that:

- (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; and
- (2) Equipment is not operated in a reckless manner, or in a manner unsafe to the public or the environment.

2. DESCRIPTION OF THE PROJECT AND THE SITE

The Project 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

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

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 **through the end of the twenty-year term of CFF's Vermont SPEED Standard Offer Purchase Power Agreement** with the SPEED Facilitator (Standard Offer PPA). CFF's Standard Offer PPA commences on the date that the Project is commissioned, which is expected to be on or about August 3, 2010. 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 Project to VEC's electric system are identified below and on the **Technical Requirements** attachment to this Agreement. CFF is responsible for the design of these interconnection facilities and VEC 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 requirements are solely for the protection of VEC's facilities. VEC takes no responsibility for the adequacy of the required interconnection equipment in protecting the Project.

- a. CFF 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 VEC's electric system.

Generation Equipment

Generator	kVA	RPM	kW	Volts	Pf*
Farm Methane	375	1200	300	480	0.8

*See Section 6 for Power Factor restrictions.

Interconnection Facilities

An electric line to connect said generation equipment through appropriate interconnection facilities to VEC's electric system at the Interconnection Point designated as the North Troy distribution system, Pole 116/60, on VT Route 105 East, in the Town of Troy, Vermont.

- b. CFF shall own and pay for the cost of installing generator step-up transformation and associated facilities necessary to convert the output of the generation equipment to the voltage, frequency, and phase of VEC's electric system at the designated Interconnection Point. Unless otherwise agreed to in writing by VEC, the transformation will be owned by CFF and shall be purchased and installed by CFF to VEC's specifications.
- c. CFF shall pay the cost incurred by VEC to install an approved, visible, lockable disconnect device adequate to provide safe working clearance for VEC personnel. It shall be accessible to and available for control by VEC personnel at all times following notification of CFF, except when such notification would tend to prolong a dangerous situation. When VEC has opened and tagged the disconnect device, CFF **SHALL NOT OPERATE** the device without prior approval from the VEC representative designated on the tag attached to the disconnect device.
- d. CFF shall install relaying and protective devices that will automatically and physically disconnect CFF's generation equipment from the VEC electric system whenever required by a fault or abnormal frequency or voltage condition on the VEC electric system, until that system shall return to a normal status. Such devices shall **not** automatically reconnect CFF's generation equipment to the VEC electric system after such an occurrence unless automatic phasing equipment is installed and only after a predetermined time delay to allow for testing of the line and return to normal operation.

The CFF owned and operated protective equipment shall include:

- Circuit Breaker (52)
 - Over/Under Voltage Relays (27 / 59)
 - Over/Under Frequency Relay (81 O/U)
 - Unbalanced VEC 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 VEC
 - Fused disconnects located on the primary riser pole (#116/60) and installed on the generator side of the load break three phase gang switch (#3F6X)
 - Any Additional Required Devices based on Interconnection Studies
- e. CFF shall install such reactive power generating facilities as necessary so that the Project operates within the power factor requirements specified in Section 6.b Electric Characteristics.
- f. CFF shall pay for, and VEC shall install and maintain, metering equipment adequate to accurately measure and record generator step-up transformation losses, capacity, and energy delivered by the Project in a manner consistent with the SPEED Facilitator's requirements for "Vermont Standard Offer Projects", and VEC's tariff provisions.
- g. CFF shall pay for and VEC shall install such telemetry equipment as necessary so that the hourly production of the Project can be reported in a timely manner to the SPEED Facilitator, or the SPEED Facilitator's designee. CFF will be responsible for paying any costs associated with interrogating the generation meter.
- h. CFF is responsible for making any future enhancements to its facilities that may become necessary to operate the CFF Project in a safe and prudent manner due to improvements and/or changes made to the VEC electric system. Failure to do so will result in disconnection of the CFF Project from the VEC system.
- i. VEC will be responsible for delivering the output from the Project to an interconnection with Vermont Electric Power Company ("VELCO"). These transmission services will be provided pursuant to VEC's Transmission Tariff (Schedule 21-VEC of ISO-NE's Open Access Transmission Tariff or a successor agreement).

- j. The SPEED Facilitator will be responsible for obtaining transmission services under VEC's Transmission Tariff.

6. ELECTRIC CHARACTERISTICS

- a. CFF shall generate electricity at the Project in such a manner that it is compatible with VEC's electrical system at the Interconnection Point.
- b. CFF 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 VEC.
- c. Should CFF fail to meet the power factor levels required under this section of the Agreement, in addition to any other remedies that may be available, CFF shall pay VEC a charge for excess reactive power delivered by VEC to CFF as determined by the following formula.

$$\text{Charge} = \left[\left[\frac{\text{Maximum Generation}}{(0.02 + \text{Power Factor})} \right] - \text{Maximum Generation} \right] \times \text{Demand Rate}$$

Where:

- Maximum Generation is the highest measured hourly generation in kilowatts during the billing period, and
- Demand Rate is the appropriate industrial demand rate under VEC's retail tariff (i.e., Service Classification #3, Distribution – Firm Demand Charge Rate (\$/kW-month).

7. TESTING AND MAINTENANCE OF INTERCONNECTION FACILITIES

- a. Prior to the initial closing of the interconnection, CFF shall have a determination made that all interconnection equipment meets the specifications and is functioning properly, and notifies VEC of the determination in writing. CFF shall promptly certify the results of such testing to VEC. CFF shall furnish a copy of all relay settings to VEC.
- b. CFF 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 VEC system. Maintenance by CFF shall include regularly scheduled testing of relaying and protective devices in a manner acceptable to VEC and as recommended by the manufacturer of such equipment and is consistent with Prudent Engineering and Operating Practice. CFF shall be responsible for the costs of VEC to perform maintenance and testing on the VEC owned protective devices necessary for interconnection of the Project to the VEC system and for periodic testing of the metering equipment.

- c. VEC shall have the right, at all reasonable times and upon reasonable notice to CFF, to inspect the Project and the 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 VEC.
- d. Any inspection, operational testing, or witnessing of testing by VEC under the provisions of this Agreement shall not be construed as any warranty of safety, durability or reliability of the Project or CFF's interconnection facilities. VEC shall not, by reason of such inspection or failure to inspect, be responsible for the strength, safety, design, adequacy, or capacity of CFF's interconnection equipment.

8. DISCONNECTION OF PROJECT AND INTERCONNECTION FACILITIES

- a. CFF agrees to operate the Project and the interconnection facilities so that no adverse effect shall occur to the VEC electric system or to any of its other customers. Should such adverse effects occur, as reasonably defined by VEC, or should the potential for such adverse effect exist, CFF agrees to take such corrective action, as VEC deems reasonably necessary; provided, however, that CFF shall retain the right to contest the reasonableness of the VEC actions in any appropriate forum.
- b. VEC has the right to immediately disconnect, without liability, the Project from the VEC electric system if, in VEC's reasonable opinion, the interconnection represents a condition that is likely to result in imminent significant disruption of service to VEC 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 VEC's customers, or could become likely to endanger life or property, VEC will give CFF notice in writing of the corrective measures it seeks to have implemented and the time period for such implementation. If the corrective measures are not implemented within the reasonable time period, VEC may immediately disconnect, without liability, CFF's generation equipment. Should a dispute concerning the need to immediately disconnect exist, either Party may initiate action pursuant to Section 14 Dispute Resolution.
- d. VEC may open, or require CFF to open, the interconnection whenever reasonably necessary to perform either routine or emergency maintenance or repairs to VEC's own facilities or facilities of interconnected utilities. Except for emergencies, VEC shall give advance notice of such maintenance or repairs and shall attempt to schedule the same in order to accommodate CFF's operating schedule. Should a dispute concerning the need to disconnect exist, either Party may initiate action pursuant to Section 14 Dispute Resolution.

- e. In all cases when VEC has caused CFF's facilities to be disconnected from its electric system, VEC shall resume the interconnection as soon as maintenance or repair work ceases or when CFF has completed required corrective actions.

9. INTERRUPTION OF INTERCONNECTION

VEC 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 CFF 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 VEC 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 VEC, or by any cause except willful default on VEC's part.

10. ELECTRIC SERVICE

Except as otherwise provided for herein, CFF will receive and pay for electricity from the VEC system in accordance with all relevant terms and conditions in the VEC 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 AND LIMITATION OF LIABILITY

- a. Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as specifically authorized by this Agreement.
- b. Each Party shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the indemnifying Party's action or failure to meet its obligations under this Agreement on behalf of the indemnified Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

- c. If the indemnifying Party is obligated to indemnify and hold the indemnified Party harmless under this Article, the amount owing to the indemnified Party shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.
- d. Promptly after receipt of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

12. CONSEQUENTIAL DAMAGES

Neither Party shall be liable to the other Party for any losses, damages, costs or expenses for any special, indirect, consequential, incidental, punitive or exemplary damages, including but not limited to loss of profits.

13. INSURANCE

CFF shall maintain in force, liability coverage with minimum limits of \$1,000,000 per occurrence, \$2,000,000 in the aggregate for the term of this Agreement.

VEC and CFF shall maintain in full force and effect a policy or policies of insurance sufficient to insure their respective obligations under workers compensation law.

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

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 CFF.

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

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

CFF shall provide VEC a copy of each insurance policy required hereunder.

14. DISPUTE RESOLUTION

CFF and VEC shall attempt in good faith to resolve between themselves any disputes that may arise hereunder. In the event that CFF and VEC are unable to resolve any such dispute, the Parties shall have recourse to mediation, arbitration, or other alternative dispute resolution device of their mutual selection. If the Parties cannot agree on an alternative dispute resolution device, arbitration shall be selected. Any arbitration shall be conducted in accordance with the commercial arbitration rules of the American Arbitration Association unless otherwise agreed upon. The award rendered by any arbitrator or resolution reached in any alternative dispute resolution proceeding shall be final and binding and judgment may be entered upon it in accordance with the applicable law in any court having jurisdiction thereof. Any arbitration proceeding initiated pursuant to this Paragraph shall be held at a site reasonably agreed to by the parties.

15. ASSIGNMENT / SUCCESSORS

Neither CFF nor VEC 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 connection with the sale, merger, or unbundling of services as a result of legislative and regulatory electric restructuring approved by the Vermont Public Service Board. 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:

VEC: VERMONT ELECTRIC COOPERATIVE
Attn: Chief Operating Officer
42 Wescom Road
Johnson, VT 05656

CFF: CHAPUT FAMILY FARMS
Attn: Reg & Michael Chaput
2473 VT ROUTE 105 E
North Troy, VT 05859

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 generation interconnection, supersedes any and all previous understandings between the Parties, and binds and inures to the benefit of the Parties, their successors and assignees.

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, 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 Public Service Board of a permit pursuant to 30 V.S.A. § 248 approving the construction, ownership and operation of the interconnection equipment associated with the Project in a form acceptable to the Parties; and
- b. The Parties shall have established appropriate relay and protection requirements for the interconnection of the Project that are acceptable to VEC, 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 Project in parallel with the VEC electric system, which protocols shall be reflected in an **Operating Protocols** appendix to be made a part hereof; and
- d. The arrangement by the SPEED Facilitator for transmission services over VEC's system pursuant to the terms of VEC's Transmission Tariff.

23. ACKNOWLEDGEMENT OF ARBITRATION

THE PARTIES HERETO UNDERSTAND THAT THIS AGREEMENT CONTAINS AN AGREEMENT TO ARBITRATE. AFTER SIGNING THIS DOCUMENT, THE PARTIES UNDERSTAND THAT THEY WILL NOT BE ABLE TO BRING A LAWSUIT CONCERNING ANY DISPUTE THAT MAY ARISE WHICH IS COVERED BY THE ARBITRATION AGREEMENT UNLESS THE DISPUTE INVOLVES A QUESTION OF CONSTITUTIONAL OR CIVIL RIGHTS. INSTEAD, THE PARTIES AGREE TO SUBMIT ANY SUCH DISPUTE TO AN IMPARTIAL ARBITRATOR.

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

Chaput Family Farms

Vermont Electric Cooperative, Inc.

By: Ray Chaput

By: [Signature]

Its: Owner

Its: Chief Operating Officer

INTERCONNECTION TECHNICAL REQUIREMENTS

BETWEEN

VERMONT ELECTRIC COOPERATIVE, INC.

AND

CHAPUT FAMILY FARMS

FOR THE

CHAPUT FAMILY FARMS

COW-METHANE ELECTRIC GENERATION PROJECT

INTERCONNECTION TECHNICAL REQUIREMENTS
FOR
CHAPUT FAMILY FARMS (“CFF”)

These interconnection Technical Requirements are designed to provide protection to the public, Vermont Electric Cooperative, Inc. (“VEC”) and to VEC’s personnel and equipment from the physical and financial risks associated with the interconnection and parallel operation of generation equipment. The interconnection Technical Requirements accomplish this task by:

1. Ensuring proper protective devices are installed at the site, at the interconnection point, and on the VEC system
2. Ensuring proper metering equipment is installed to properly measure all power flows resulting from the interconnection,
3. Establish performance criteria to minimize the probability that the generation equipment will reduce the quality of service on the VEC system,
4. Establishing financial and insurance requirements that protect VEC and its customers from costs that may result from the interconnection, and
5. Establishing general operating procedures to govern the interconnection.

The interconnected generating facility operator shall be responsible for the installation, operation, and maintenance of all equipment required for the interconnection of its generation equipment with the VEC system. The interconnected generating facility operator has paid the cost for the interconnection and system studies initially deemed necessary to properly design and operate the interconnection.

I. PROTECTIVE DEVICES

The protective devices are grouped into two classifications, required and recommended. Required devices must be installed at all interconnection points between the VEC system and generation facility operator's generation equipment, both synchronous and asynchronous. While asynchronous generation equipment is generally not capable of operating without the VEC grid, it is capable of maintaining operation if sufficient capacitance is present to supply the reactive requirements of the generation equipment and the coexisting load. Since capacitors are used for voltage support on the VEC grid and for power factor correction on asynchronous generation equipment, it may be possible for asynchronous generation equipment to become self-excited during abnormal system conditions and behave as if it were synchronous generation equipment. Recommended devices may be installed at the generation facility operators' discretion to provide additional protection to the VEC system and to the generation

facility's equipment.

All protective devices shall be designed, installed, operated, and maintained in accordance with prudent engineering and operating practices. All required and recommended protective relays shall be utility grade relays (certified by the manufacture as meeting all criteria of ANSI Standard C37.90) unless otherwise specified.

The Point of Common Coupling ("PCC") is defined as the location of the VEC owned recloser located on VEC's electric system that connects to the said generation equipment through appropriate interconnection facilities on the North Troy distribution system, located at or near VT Route 105 East, in the Town of Troy, Vermont.

The Point of Distributed Resources Connection ("Point of DR Connection") is defined as the point where CFF connects to the generator side terminals of to the disconnect air-break switch (#3F6X) located on the primary riser pole (#116/60) at 2473 VT Route 105 East, in the Town of Troy, Vermont.

A. Transformer Connection:

Three Phase Generators – VEC will accept step-up transformers with a low voltage delta high voltage ungrounded wye configuration on distribution circuits, which are rated at 15kV and below. **Any other transformer configuration will require specific approval by VEC.**

B. Required Protection

1. **Principal Disconnect Device** – The generation facility operator shall provide, at a location to be specified by VEC, a visible and lockable disconnect device which is capable of providing working clearance for maintenance and repair work in accordance with the VEC safety rules and practices. This disconnect device shall be accessible to VEC personnel at all times and shall be capable of being locked open under VEC control. The visible and lockable disconnect device is the air-break switch (#3F6X) located on the primary riser pole (#116/60) at 2473 VT Route 105 East, in the Town of Troy, Vermont.
2. **Circuit Breaker** – The generation facility operator shall provide a circuit breaker for each generator that is capable of isolating the generation equipment under abnormal conditions from the VEC system. The circuit breaker shall be capable of interrupting the maximum fault current available at the breaker's location from both the VEC system and the non-VEC generation equipment. The circuit breaker shall be equipped with an approved stored-energy tripping device.
3. **Three phase Interrupting Device** – A three phase interrupting device in the form of a three phase recloser will be required. This three phase recloser will be located at the PCC. The recloser shall be capable of interrupting the maximum fault current available at the recloser's location from both the VEC system and

the non-VEC generation equipment. The purpose of this device is to protect the VEC system in the event that the circuit breaker required in Paragraph 2 above fails to operate properly. While this recloser will, in fact, provide some additional protection to the generation facility, that is not its purpose or intent, and no guarantees or warranties are offered by VEC to that effect. If the recloser fails to operate, VEC is not responsible for possible damage to the generation facility.

4. **Relay Functions** – Over and under voltage, over and under frequency, phase over current with voltage control, and either zero-sequence over voltage or neutral over current and synchronizing relay functions are required. Additional relay functions may be specified by VEC. Settings will be as specified by VEC after review.

The generation facility operator shall provide relaying functions to clear both phase and ground short circuit faults on the VEC system. The operating characteristics shall be reviewed and approved by VEC.

NOTE: All relay functions can be combined in a single microprocessor based relay.

5. **Additional Equipment** – The generation facility operator is responsible to make any future enhancements to its facilities that may become necessary to operate the generating facility in a safe and prudent manner due to improvements and/or changes made to the VEC electric system. In the event that, during the first six months of operation, VEC shall determine that additional system upgrades are necessary to permit the interconnected operation of CFF's generating facility with the VEC electric system, CFF shall remain responsible for the cost of said system upgrades.

B. Recommended Protection

1. **Unbalanced Current and/or Voltage** – VEC may utilize single phase fuses and automatic line switching devices for system protection functions on its transmission and distribution systems. The occurrence of an undetected fault or the operation of single-phase protective devices may cause a current and/or voltage unbalance on the VEC system. The generation facility operator shall have the sole responsibility for protecting its equipment from such occurrences.

II. Generator Specifications

<u>Generator</u>	<u>kVA</u>	<u>RPM</u>	<u>kW</u>	<u>Volts</u>	<u>P.F.</u>
Farm Methane	375	1200	300	480	0.8

GENERATOR OPERATION PROTOCOL

BETWEEN

VERMONT ELECTRIC COOPERATIVE, INC.

AND

CHAPUT FAMILY FARMS

FOR THE

CHAPUT FAMILY FARMS

COW-METHANE ELECTRIC GENERATION PROJECT

VERMONT ELECTRIC COOPERATIVE, INC.

GENERATION OPERATION PROTOCOL

CHAPUT FAMILY FARMS

This OPERATIONAL PROTOCOL is to be used between VERMONT ELECTRIC COOPERATIVE, INC., ("VEC"), a consumer owned not-for-profit electric utility incorporated in Vermont, and CHAPUT FAMILY FARMS ("CFF")

OPERATING REQUIREMENTS

1. General Operating Requirements

CFF shall operate and maintain the generating facility in accordance with Prudent Engineering and Operating Practice and comply with all aspects of the Company's Guidelines for Generator Interconnections and tariffs. In the event that VEC has reason to believe that the CFF generating facility may be a source of problems on VEC's electrical power system, VEC shall have the right to install monitoring equipment at a mutually agreed upon location to determine the source of the problems. If the CFF generator equipment interferes with VEC's equipment and/or operations or other customer's equipment, CFF must immediately take corrective action to resolve the problem. If CFF fails to take immediate corrective action then VEC may disconnect the generating facility pursuant to this Agreement. The cost of the monitoring equipment will be borne by VEC unless the problem or problems are demonstrated to be caused by CFF's generating facility or if the test was performed at the request of the CFF.

2. No Adverse Effects; Non-interference

VEC shall notify the CFF if there is evidence that the operation of CFF's generating facility could cause disruption or deterioration of service to other VEC customers served from the same VEC electrical power system or if operation of the CFF could cause damage to VEC's electrical power system or affected systems. The deterioration of service could be, but is not limited to, harmonic injection in excess of IEEE STD519, as well as voltage fluctuations caused by large step changes in loading at the generating facility. Each Party will notify the other of any emergency or hazardous condition or occurrence with its equipment or facility which could effect the operation of the other Party's equipment or facilities. Each Party shall use reasonable efforts to provide the other Party with advance notice of such conditions.

VEC will operate its electric system in such a manner so as to not unreasonably interfere with the operation of CFF's generating facility. CFF will protect itself from normal disturbances propagating through the VEC electric system. Examples of such disturbances could be, but are not limited to, single-phase events, voltage sags from remote faults on the VEC electric system, and outages on VEC's electric system.

SAFE OPERATIONS MAINTENANCE

1. **General:** Each Party shall operate, maintain, repair and inspect and shall be fully responsible for, the respective generating facility or electric system facilities that it now or hereafter may own unless otherwise specified in this Agreement. Each Party shall be responsible for the maintenance, repair, and condition of its respective lines and appurtenances. VEC and the CFF shall each provide equipment that adequately protects the VEC electric system, personnel, and other persons from damage and injury. If VEC has constructed or owns facilities that are identified at the time of interconnection as specifically required by or as a result of the interconnection, the CFF will be required to pay VEC's cost of maintaining and repairing those facilities.
2. **Ongoing Maintenance -Testing of generating facilities:** Maintenance testing of the protective relaying is imperative for safe, reliable operation. The test cycle for protective relaying must not be less frequent than once every 60 calendar months or manufacturer's recommendation, which ever is more frequent. CFF must provide copies of these test records to VEC. Failure to adhere to these guidelines may be sufficient cause to require the generating facility to be disconnected from VEC's electric system.

ACCESS

1. VEC and CFF Representatives

Each party shall provide and update as necessary the telephone number that can be used at all times to allow either party to report an emergency.

2. VEC Rights to Access Cooperative-Owned Facilities and Equipment

CFF shall allow VEC access to VEC equipment and the VEC facilities located on the generating facility's premises. To the extent that the CFF does not own all or part of the property on which VEC is required to locate its equipment or facilities to serve the generating facility, the CFF shall secure and provide to VEC the necessary rights for access to such equipment or facilities, including easements in a form acceptable to VEC.

3. Disconnect (Air-break) Switch

VEC shall have access, at all times, to the disconnect air-break switch (#3F6X) located on the primary riser pole (#116/60) at 2473 VT Route 105 East, in the Town of Troy, Vermont.

4. Right to Review Information

VEC shall have the right to review and obtain copies of CFF's operations and maintenance records, logs, or other information such as generator unit

availability, maintenance outages, circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to CFF's generating facility or its interconnection with the VEC electric system. This information will be treated by VEC as confidential and used only for the purpose of determining CFF's compliance with this Agreement.

DISCONNECTION

1. Temporary Disconnection

- a. **Emergency Conditions:** VEC shall have the right to immediately and temporarily disconnect CFF's generating facility without prior notification in cases where, in the reasonable judgment of VEC, continuance of such service to the generating facility is imminently likely to (1) endanger persons or damage property or (2) cause a material adverse effect on the integrity or security of, or damage to, the VEC electric system or to the electric system of others to which the VEC electric system is directly connected.

A CFF representative shall notify VEC promptly when the CFF becomes aware of an emergency condition that affects the generator that may reasonably be expected to affect the VEC electric system. To the extent information is known, the notification shall describe the emergency condition, the extent of the damage or deficiency, or the expected effect on the operation of both Parties' facilities and operations, its anticipated duration and the necessary corrective action.

Routine Maintenance, Construction, and Repair: VEC shall have the right to disconnect CFF's generating facility from the VEC electric system when necessary for routine maintenance, construction, and repairs on the VEC electric system. See the details found in the document below regarding routine line maintenance and emergency line work disconnect procedures. If CFF requests disconnection by VEC at the Recloser, the CFF will provide a minimum of five (5) days notice to VEC. VEC shall make an effort to schedule such curtailment or temporary disconnection with the CFF.

- b. **Forced Outages:** During any forced outage, VEC shall have the right to suspend interconnection service to effect immediate repairs on the VEC electric system. VEC shall use reasonable efforts to provide CFF with prior notice. Where circumstances do not permit such prior notice to the CFF, VEC may interrupt interconnection service and disconnect CFF's generating facility from the VEC electric system without such notice.
- c. **Non-Emergency Adverse Operating Effects:** VEC may disconnect CFF's generating facility if the generating facility is having an adverse operating effect on the VEC electric system or other VEC customers. VEC may disconnect CFF's generating facility if the generator fails to

correct such adverse operating effect after written notice has been provided and a minimum of thirty (30) calendar days to correct such adverse operating effect has elapsed.

- d. **Modification of CFF's Generating Facility:** VEC has the right to immediately suspend interconnection service in cases where material modification to the generating facility or interconnection facilities have been implemented without prior written authorization from VEC.
- e. **Re-connection:** Any curtailment, reduction or disconnection shall continue only for so long as reasonably necessary. CFF and VEC will cooperate with each other to restore CFF's generator and the VEC electric system respectively, to their normal operating state as soon as reasonably practicable following the cessation or remedy of the event that led to the temporary disconnection.

2. **Permanent Disconnection**

CFF has the right to permanently disconnect at any time with thirty (30) calendar days written notice to VEC.

- a. VEC may permanently disconnect CFF's generating facility upon termination of this Agreement in accordance with the terms hereof and in the case of CFF's inability to correct an adverse operating effect after notice thereof.

GENERATOR RECONNECT

CFF's generator can be reconnected to VEC once live line conditions on the VEC electric system are detected for a minimum of two (2) minutes. CFF shall auto synchronize the generator to VEC system. However, based on recommendations made in the System Impact Study, CFF's generator is only allowed to reconnect once per hour due to power quality issues.

ROUTINE LINE MAINTENANCE (VEC Distribution Line De-energized):

(Disconnection)

1. VEC System Operations will notify CFF via telephone of a required disconnection of the generator for routine "HOT" line maintenance work. No less than 1 hour of prior notice shall be given. Such notice shall communicate the reason for the disconnection to CFF and the expected duration of the disconnection.
2. CFF will then have its generator disconnected from the VEC system by the required time. CFF shall also defeat the automatic synchronization feature, and shall not re-arm this feature until directed by VEC System Operations.
3. Upon arrival at CFF:
 - a. VEC line personnel will communicate with VEC System Operations, who will remotely open the recloser (#3F6) via SCADA.

- b. VEC personnel will verify that the recloser has opened, and then open and lock the air-break switch (#3F6X).

ROUTINE LINE MAINTENANCE (VEC Distribution Line De-energized):
(Re-Energizing)

1. When work has been completed, VEC personnel will return to CFF.
2. Upon arrival at CFF, VEC personnel will contact VEC System Operations to close the air-break switch (#3F6X).
3. After VEC System Operations is informed that the air-break is closed and that the line side of the recloser is energized, VEC System Operations will close the recloser (#3F6) via SCADA.
4. VEC System Operations will then contact CFF (see Contact Information) and give permission to tie back onto our system.

EMERGENCY LINE WORK (Grounded Work):

VEC personnel will operate the protective equipment as necessary on the electric system to maintain a safe, dependable and reliable source of power to its customers.

Upon notification of a power outage, VEC personnel will be dispatched to patrol, locate any and all problems, do the proper switching and tagging as needed, repair any and all problems on the distribution system and restore power to its customers in a safe and timely manner.

Any and all grounded line work will require the CFF generators to be disconnected from the VEC electric system. VEC System Operations will ensure that this action occurs by opening the recloser via SCADA. In the event of communication failure, the recloser will be operated locally by VEC line workers.

If circumstances allow, VEC System Operations will inform CFF of the need for an emergency outage. Notification, however, cannot impede or interfere with the response to an emergency situation.

Contact Information:

Chaput Family Farms

Person: Reg or Michael Chaput

Mailing Address: Chaput Family Farms
2473 VT ROUTE 105 E
North Troy, VT 05859

Priority Telephone Numbers:

1. Primary – **(802) 988-2844**
2. Secondary – **(802) 988-9195**

Vermont Electric Cooperative

Person: VEC System Operator

Priority Telephone Numbers:

VEC System Operations **(802) 730-1219**

CFF can call VEC System Operations for updates to report or check on the status of an outage, at any time. VEC System Operations will summon additional resources as needed.

Operating Committee: Representative of each of the Parties shall meet from time to time, upon the request of either party, to confer on issues related to the interconnection operations of the CFF generating facility with the VEC electric system. At such meetings, the Parties shall provide each other updates to information necessary to assure that operations are conducted in accordance with Prudent Engineering and Operating Practice. The Parties shall have the right to modify, amend or restate the requirements hereof, upon consultation, with the mutual written consent of the Parties hereto. In the event that, during the first twelve (12) months of operation, VEC shall determine that additional system upgrades are necessary to permit the interconnected operation of CFF's generating facility with the VEC electric system, CFF shall remain responsible for the cost of said system upgrades.