FINAL PROPOSED RULE # 19-P53

Administrative Procedures – Final Proposed Rule Filing

Instructions:

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the "Rule on Rulemaking" adopted by the Office of the Secretary of State, this filing will be considered complete upon filing and acceptance of these forms with the Office of the Secretary of State, and the Legislative Committee on Administrative Rules.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of these forms will be used to generate a notice of rulemaking in the portal of "Proposed Rule Postings" online, and the newspapers of record if the rule is marked for publication. Publication of notices will be charged back to the promulgating agency.

PLEASE REMOVE ANY COVERSHEET OR FORM NOT REQUIRED WITH THE CURRENT FILING BEFORE DELIVERY!

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Rule 4.400, The Renewable Energy Standard Rule

RECEIVED JAN - 9 2020

_____, on 1/8/20 **BY:** .....
(signature) (date)

Printed Name and Title:
Anthony Z. Roisman, Chair
Vermont Public Utility Commission

RECEIVED BY: _____

- ☐ Coversheet
- ☐ Adopting Page
- ☐ Economic Impact Analysis
- ☐ Environmental Impact Analysis
- ☐ Strategy for Maximizing Public Input
- ☐ Scientific Information Statement (if applicable)
- ☐ Incorporated by Reference Statement (if applicable)
- ☐ Clean text of the rule (Amended text without annotation)
- ☐ Annotated text (Clearly marking changes from previous rule)
- ☐ ICAR Minutes
- ☐ Copy of Comments
- ☐ Responsiveness Summary

1. TITLE OF RULE FILING:
   Rule 4.400, The Renewable Energy Standard Rule
2. PROPOSED NUMBER ASSIGNED BY THE SECRETARY OF STATE
   19P–053
3. ADOPTING AGENCY:
   Vermont Public Utility Commission
4. PRIMARY CONTACT PERSON:
   (A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

   Name: Elizabeth Schilling, Esq.

   Agency: Vermont Public Utility Commission

   Mailing Address: 112 State Street, Montpelier, VT 05620-2701

   Telephone: 802 828 - 2358 Fax: 802 828 - 3351

   E-Mail: elizabeth.schilling@vermont.gov

   Web URL *(WHERE THE RULE WILL BE POSTED)*:
   https://puc.vermont.gov/about-us/statutes-and-rules
5. SECONDARY CONTACT PERSON:
   (A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

   Name: Tom Knauer, Policy Director

   Agency: Vermont Public Utility Commission

   Mailing Address: 112 State Street, Montpelier, VT 05620-2701

   Telephone: 802 828 - 2358 Fax: 802 828 - 3351

   E-Mail: thomas.knauer@vermont.gov
6. RECORDS EXEMPTION INCLUDED WITHIN RULE:
   (DOES THE RULE CONTAIN ANY PROVISION DESIGNATING INFORMATION AS CONFIDENTIAL; LIMITING ITS PUBLIC RELEASE; OR OTHERWISE EXEMPTING IT FROM INSPECTION AND COPYING?) No

   IF YES, CITE THE STATUTORY AUTHORITY FOR THE EXEMPTION:

   PLEASE SUMMARIZE THE REASON FOR THE EXEMPTION:
7. LEGAL AUTHORITY / ENABLING LEGISLATION:

(THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).

30 V.S.A. §§ 8001(b), 8004(b), and 8005(a)(3)(F); Public Act 139 § 14 (2018 Vt. Adj. Sess.)(amending Public Act 56, § 8(d) (2015 Vt. Bien. Sess.)).

8. EXPLANATION OF HOW THE RULE IS WITHIN THE AUTHORITY OF THE AGENCY:
   Sections 8001(b) and 8004(b) of title 30 of the Vermont Statutes Annotated grant the Vermont Public Utility Commission broad authority to adopt the rules necessary to allow the Commission and the Vermont Department of Public Service to implement the Vermont Renewable Energy Standard ("RES"). Additionally, 30 V.S.A. § 8005(a)(3)(F) requires the Commission's rules to implement the RES to include and address various provisions. Finally, Section 14 of Public Act 139 (2018 Vt. Adj. Sess.) explicitly directed the Commission to commence this rulemaking on or before July 1, 2019.
9. THE FILING HAS CHANGED SINCE THE FILING OF THE PROPOSED RULE.
10. THE AGENCY HAS INCLUDED WITH THIS FILING A LETTER EXPLAINING IN DETAIL WHAT CHANGES WERE MADE, CITING CHAPTER AND SECTION WHERE APPLICABLE.
11. SUBSTANTIAL ARGUMENTS AND CONSIDERATIONS WERE RAISED FOR OR AGAINST THE ORIGINAL PROPOSAL.
12. THE AGENCY HAS INCLUDED COPIES OF ALL WRITTEN SUBMISSIONS AND SYNOPSES OF ORAL COMMENTS RECEIVED.
13. THE AGENCY HAS INCLUDED A LETTER EXPLAINING IN DETAIL THE REASONS FOR THE AGENCY'S DECISION TO REJECT OR ADOPT THEM.
14. CONCISE SUMMARY (**150 WORDS OR LESS**):
    The RES requires electric utilities to acquire specified amounts of renewable energy and to achieve fossil-fuel and greenhouse gas reductions by implementing energy transformation projects. The RES is divided into three Tiers. Tier I requires utilities to procure renewable energy equal to 55% of their annual retail electric sales for the year 2017, increasing by

4% every third January 1 thereafter, eventually reaching 75% in 2032. Tier II requires utilities to procure renewable energy equal to 1% of their annual retail electric sales from new distributed renewable generation resources under 5 MW in 2017, increasing by 3/5 a percent each year thereafter, eventually reaching 10% in 2032. Tier III requires utilities to procure additional distributed renewable generation eligible for Tier II or to achieve fossil-fuel reductions from energy transformation projects equal to 2% of their annual retail electric sales in 2017, increasing by 2/3 a percent each year thereafter, eventually reaching 12% in 2032.

15. EXPLANATION OF WHY THE RULE IS NECESSARY:

The RES is currently implemented pursuant to a series of orders issued by the Vermont Public Utility Commission in 2016 (Investigation re: establishment of the Renewable Energy Standard program, Docket 8550, Orders of 3/15/16, 6/28/16, and 10/27/16). This rulemaking is required by Section 14 of Public Act 139 (2018 Vt. Adj. Sess.), which explicitly directed the Commission to commence rulemaking for the RES on or before July 1, 2019. The proposed rule is necessary to comply with statute, is based on the existing orders implementing the RES, and expands upon and clarifies various provisions implementing the RES based on the Commission's, Department's, utilities', and stakeholders' experience working with the RES over the past several years.

16. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY:

The Rule is based upon the applicable provisions of 30 V.S.A. Chapter 89, the Commission orders currently implementing the RES, the Commission's experience implementing the RES, and comments from stakeholders. Before initiating formal rulemaking, Commission staff conducted two workshops, issued an order and draft rule, and received rounds of comments from stakeholders. Stakeholders included the Vermont Department of Public Service, the Vermont electric utilities, energy service providers, energy trade

organizations, and non-profits with an interest in energy and environmental issues.

The Commission gave careful consideration to the comments raised by stakeholders and requested further comment from stakeholders during the formal public comment period. The Commission's order requesting general comments as well as comments on several specific issues is available through ePUC under Case No. 19-2568-RULE.

17. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

The RES affects:

- The Vermont Department of Public Service.

- The Vermont electric utilities: Green Mountain Power Corporation; Burlington Electric Department; Vermont Electric Cooperative; Washington Electric Cooperative; Stowe Electric Department; and the municipal electric utilities represented by the Vermont Public Power Supply Authority.

- Renewable energy generators.

- Efficiency Vermont and entities and businesses that provide services that qualify as energy transformation measures.

- Vermont electric ratepayers.

18. BRIEF SUMMARY OF ECONOMIC IMPACT (150 WORDS OR LESS):

The RES statute, not this rule, establishes the renewable energy and energy transformation project requirements that may affect electric rates and may have other economic effects related to the deployment of additional distributed renewable energy (i.e., projects of 5 MW or less) in the state as well as the deployment of energy transformation projects that reduce fossil fuel use and greenhouse gas emissions. Additionally, 30 V.S.A. § 21 establishes the Department's authority to allocate costs to electric utilities for the Department's work evaluating energy transformation projects.

The rule is largely focused on establishing the processes and procedures necessary for ensuring compliance with the RES requirements.

19. A HEARING WAS HELD.

20. HEARING INFORMATION

(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION.

Date: 9/23/2019

Time: 06:30 PM

Street Address: Kellogg-Hubbard Library, East Montpelier Meeting Room, 135 Main Street

Zip Code: 05602

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

21. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING):

10/4/2019

KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

Renewable Energy Standard

RES

renewable portfolio standard

renewable energy

distributed renewable generation

energy transformation projects

distributed energy resources

DER

Administrative Procedures – Adopting Page

Instructions:

This form must accompany each filing made during the rulemaking process:

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible, the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

1. TITLE OF RULE FILING:
   Rule 4.400, The Renewable Energy Standard Rule
2. ADOPTING AGENCY:
   Vermont Public Utility Commission
3. TYPE OF FILING (*PLEASE CHOOSE THE TYPE OF FILING FROM THE DROPDOWN MENU BASED ON THE DEFINITIONS PROVIDED BELOW*):

   - **AMENDMENT** - Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
   - **NEW RULE** - A rule that did not previously exist even under a different name.
   - **REPEAL** - The removal of a rule in its entirety, without replacing it with other text.

   This filing is **A NEW RULE** .

4. LAST ADOPTED (*PLEASE PROVIDE THE SOS LOG#, TITLE AND EFFECTIVE DATE OF THE LAST ADOPTION FOR THE EXISTING RULE*):

   None.

State of Vermont
Agency of Administration
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Montpelier, VT 05609-0201
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Office of the Secretary

INTERAGENCY COMMITTEE ON ADMINISTRATIVE RULES (ICAR) MINUTES

Meeting Date/Location: August 9, 2019, Pavilion Building, 5th floor conference room, 109 State Street, Montpelier, VT 05609

Members Present: Steve Knudson (Acting Chair), Ashley Berliner, John Kessler, Clare O'Shaughnessy Matt Langham, and Dirk Anderson. Diane Bothfeld and Jennifer Mojo participated via phone

Members Absent: Chair Brad Ferland

Minutes By: Melissa Mazza-Paquette

- 2:00 p.m. meeting called to order, welcome and introductions.
- Review and approval of minutes from the July 8, 2019 meeting.
- No additions/deletions to agenda. Agenda approved as drafted.
- No public comments made.
- Presentation of Proposed Rules on pages 2-14 to follow.
  1. Rule 4.400, The Renewable Energy Standard Rule, Vermont Public Utility Commission, page 2
  2. Child Support Guidelines, Agency of Human Services, Department of Children and Families, Office of Child Support, page 3
  3. Business Entity Limited Lines Producer for Self-Storage Insurance License (I-2019-02), Department of Financial Regulation, page 4
  4. Choices for Care, Agency of Human Services, Department of Disabilities, Aging and Independent Living, page 5
  5. Rules of the Board of Medical Practice, Agency of Human Services, Department of Health, page 6
  6. Rules Governing Inspection of Motor Vehicles, Agency of Transportation, Department of Motor Vehicles, page 7
  7. Audiology Services, Agency of Human Services, page 8
  8. Eyewear and Vision Care Services, Agency of Human Services, page 9
  9. Dental Services for Beneficiaries Under Age 21, and Pregnant and Postpartum Women, Agency of Human Services, page 10
  10. Dental Services for Beneficiaries Age 21 and Older, Agency of Human Services, page 11
  11. Medicaid Cost Sharing, Agency of Human Services, page 12
  12. Medically Complex Nursing Services, Agency of Human Services, page 13
  13. In-Home Lactation Consultation Services, Agency of Human Services, page 14
- Next scheduled meeting is Monday, September 9, 2019 at 2:00 p.m.
- 3:15 p.m. meeting adjourned.

Proposed Rule: Rule 4.400, The Renewable Energy Standard Rule, Vermont Public Utility Commission
Presented by Elizabeth Schilling, Tom Knauer and Mary Jo Krolewski

Motion made to accept the rule by Dirk Anderson, seconded by Matt Langham, and passed unanimously, with the following recommendations:

1. Proposed Rule Coversheet, page 5, #12: Reference any fees that may be charged due to State statue as described in #9 of page 15 of the rule.
2. Proposed Rule Coversheet, page 5, #14: Complete.
3. Public Input, page 1, #3: Include strategy as discussed and mentioned in #4.

Administrative Procedures – Economic Impact Analysis

Instructions:

In completing the economic impact analysis, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule; estimates the costs and benefits for each category of people enterprises and government entities affected by the rule; compares alternatives to adopting the rule; and explains their analysis concluding that rulemaking is the most appropriate method of achieving the regulatory purpose.

Rules affecting or regulating schools or school districts must include cost implications to local school districts and taxpayers in the impact statement, a clear statement of associated costs, and consideration of alternatives to the rule to reduce or ameliorate costs to local school districts while still achieving the objectives of the rule (see 3 V.S.A. § 832b for details).

Rules affecting small businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof), must include ways that a business can reduce the cost or burden of compliance or an explanation of why the agency determines that such evaluation isn't appropriate, and an evaluation of creative, innovative or flexible methods of compliance that would not significantly impair the effectiveness of the rule or increase the risk to the health, safety, or welfare of the public or those affected by the rule.

1. TITLE OF RULE FILING:

   Rule 4.400, The Renewable Energy Standard Rule

2. ADOPTING AGENCY:

   Vermont Public Utility Commission

3. CATEGORY OF AFFECTED PARTIES:

   LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

   The people, enterprises, and governmental entities potentially affected by the RES include:

   - The Vermont Department of Public Service.

   - The Vermont electric utilities: Green Mountain Power Corporation; Burlington Electric Department; Vermont Electric Cooperative; Washington Electric Cooperative; Stowe Electric Department; and the municipal electric

utilities represented by the Vermont Public Power Supply Authority.

- Renewable energy generators.

- Efficiency Vermont and entities and businesses that provide services that qualify as energy transformation measures.

- Vermont electric ratepayers.

Regarding the estimated costs and benefits of the rule, the RES statute, not this rule, establishes the renewable energy and energy transformation project requirements that may affect electric rates and may have other economic effects related to the deployment of additional distributed renewable energy (i.e., projects under 5 MW) in the state as well as the deployment of energy transformation projects that reduce fossil fuel use and greenhouse gas emissions. Additionally, 30 V.S.A. § 21 establishes the Department's authority to allocate costs to electric utilities for the Department's work evaluating energy transformation projects.

The rule is largely focused on establishing the processes and procedures necessary for ensuring compliance with the RES requirements.

4. IMPACT ON SCHOOLS:
INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS CLEARLY STATING ANY ASSOCIATED COSTS:

None.

5. ALTERNATIVES: *CONSIDERATION OF ALTERNATIVES TO THE RULE TO REDUCE OR AMELIORATE COSTS TO LOCAL SCHOOL DISTRICTS WHILE STILL ACHIEVING THE OBJECTIVE OF THE RULE.*

None.

6. IMPACT ON SMALL BUSINESSES:
INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON SMALL BUSINESSES (EXCLUDING IMPACTS INCIDENTAL TO THE PURCHASE AND PAYMENT OF GOODS AND SERVICES BY THE STATE OR AN AGENCY THEREOF):

None.

7. SMALL BUSINESS COMPLIANCE: *EXPLAIN WAYS A BUSINESS CAN REDUCE THE COST/BURDEN OF COMPLIANCE OR AN EXPLANATION OF WHY THE AGENCY DETERMINES THAT SUCH EVALUATION ISN'T APPROPRIATE.*

   None.

8. COMPARISON:

   COMPARE THE IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

   Section 14 of Public Act 139 (2018 Vt. Adj. Sess.) requires the Commission to adopt a rule to implement the RES. Having no rule on this subject is not an option.

   The rule does not impose requirements on small businesses.

9. SUFFICIENCY: *EXPLAIN THE SUFFICIENCY OF THIS ECONOMIC IMPACT ANALYSIS.*

   The economic impact analysis included in this form complies with the requirements of 3 V.S.A. § 838(b). The rule does not regulate and will not have any direct effects on schools or small businesses. Additionally, as stated previously, the rule primarily establishes the processes and procedures necessary for ensuring compliance with the RES statutory requirements, while the RES statute establishes the renewable energy and energy transformation project requirements that may have economic effects.

Administrative Procedures – Environmental Impact Analysis

Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

1. TITLE OF RULE FILING:

   Rule 4.400, The Renewable Energy Standard Rule

2. ADOPTING AGENCY:

   Vermont Public Utility Commission

3. GREENHOUSE GAS: *EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):*
   The purpose of the RES is to encourage the economic and environmental benefits of renewable energy, including distributed renewable generation, and to reduce fossil fuel use and the emission of greenhouse gases. The rule helps to forward those goals by establishing the processes and procedures for ensuring compliance with the RES.

4. WATER: *EXPLAIN HOW THE RULE IMPACTS WATER (E.G. DISCHARGE / ELIMINATION OF POLLUTION INTO VERMONT WATERS, THE FLOW OF WATER IN THE STATE, WATER QUALITY ETC.):*
   None.

5. LAND: *EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):*
   None.

6. RECREATION: *EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:*
   None.

7. CLIMATE: *EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:*
   The RES will benefit the climate by reducing greenhouse gas emissions through the increased use of renewable energy and the deployment of energy transformation projects. The rule will help to ensure those benefits by establishing the processes and procedures for compliance with the RES.

8. OTHER: *EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT'S ENVIRONMENT:*
   None.

9. SUFFICIENCY: *EXPLAIN THE SUFFICIENCY OF THIS ENVIRONMENTAL IMPACT ANALYSIS.*
   The environmental impact analysis included in this form complies with the requirements of 3 V.S.A. § 838(c). As stated above, the rule will not have direct environmental impacts, but rather will help to ensure compliance with the renewable energy and energy transformation project requirements established in statute.

Administrative Procedures – Public Input

Instructions:

In completing the public input statement, an agency describes the strategy prescribed by ICAR to maximize public input, what it did do, or will do to comply with that plan to maximize the involvement of the public in the development of the rule.

This form must accompany each filing made during the rulemaking process:

1. TITLE OF RULE FILING:

   Rule 4.400, The Renewable Energy Standard Rule

2. ADOPTING AGENCY:

   Vermont Public Utility Commission

3. PLEASE DESCRIBE THE STRATEGY PRESCRIBED BY ICAR TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:

   ICAR approved the Commission's proposal to hold a public hearing on the rule in Montpelier during the last full week in September and to hold open the public comment period for the required period following the public hearing.

4. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO COMPLY WITH THAT STRATEGY:

   Commission staff convened two workshops (on December 10, 2018, and January 29, 2019) about the rulemaking and requested that stakeholders provide comments about the RES processes and provisions, currently implemented by order, that may need changes or improvements. On May 2, 2019, the Commission issued an order and draft proposed rule. The order summarized the comments the Commission had received at the workshops and in writing and the Commission's decisions regarding those comments, summarized changes between the draft proposed rule and the current orders implementing the RES, and requested comment on additional issues and questions not previously addressed during the workshops. Additionally, concurrent with filing this rulemaking

package with ICAR, the Commission, in regard to the comments submitted in response to the May 2 order, issued a second order and updated rule that responded to the comments and identified the clarifying edits the Commission incorporated into the rule.

All pre-formal rulemaking comments, orders, and draft versions of the rule are available in ePUC (the Commission's electronic document management system) under Case Number 18-3810-INV, Investigation into the Renewable Energy Standard rulemaking.

During the formal rulemaking process, Commission staff held a public hearing on the rule in Montpelier, and the Commission held open the formal public comment period until October 4, 2019, to allow sufficient time for stakeholders to review the rule, confer amongst themselves, and provide comments on the proposed rule. Additionally, after the close of the formal public comment period, the Commission gave stakeholders the opportunity to respond to the comments. All responses to comments were due to the Commission by November 1, 2019.

5. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

- The Vermont Department of Public Service.

- The Vermont electric utilities: Green Mountain Power Corporation; Burlington Electric Department; Vermont Electric Cooperative; Washington Electric Cooperative; Stowe Electric Department; and the municipal electric utilities represented by the Vermont Public Power Supply Authority.

- Renewable energy generators.

- Efficiency Vermont and entities and businesses that provide services that qualify as energy transformation measures.

- Renewable Energy Vermont, Sierra Club, Vermonters for a Clean Environment, Rights & Democracy, Vermont Interfaith Power and Light, and other organizations and non-profits with an interest in energy and environmental issues.

- The Vermont Fuel Dealers Association and the National Biodiesel Board.
- Vermont electric ratepayers.

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-2568-RULE

Proposed Vermont Public Utility Commission
Rule 4.400 Renewable Energy Standard

COMMENTS OF GREEN MOUNTAIN POWER

In its July 3, 2019 Order in the above-referenced matter, the Public Utility Commission ("Commission") provided a redline to the May 2, 2019 draft Renewable Energy Standard ("RES") Rule ("Rule") submitted to the Interagency Committee on Administrative Rules and requested additional comments on the Rule. Green Mountain Power ("GMP") appreciates the efforts of the various stakeholders, the Department and the Commission and is pleased to provide its comments on the Rule.

A. Hydro Quebec and Environmental Attributes

1. The RES Statute Allows Unbundled System Attributes to Meet RES Requirements

The Commission requested briefing on whether the RES statutes allow Hydro-Quebec ("HQ") attributes that were not purchased with the associated renewable energy to be used to satisfy Tier I of the RES. In a recent case, the Vermont Supreme Court explained how statutes should be interpreted:

> *'[O]ur primary goal' when interpreting statutes is 'to give effect to the Legislature's intent.' We begin our review with the statute's plain meaning. 'If the statute is unambiguous and its words have plain meaning, we accept the statute's plain meaning as the intent of the Legislature and our inquiry proceeds no further.'*[1]

As explained in our May 24, 2019 comments[2], the language of the RES statute is unambiguous, clearly contemplates, and specifically allows for unbundled purchases of attributes, including those associated with HQ system power,[3] to be used for compliance with RES Tier I.

Title 30 of Section 8004(a) introduces the RES and outlines its requirements, establishing that a Vermont distribution utility ("VDU") cannot sell or provide electricity without "ownership of sufficient energy produced by renewable energy plants or sufficient tradeable renewable energy credits from plants whose energy is capable of delivery in New England that reflect the required

[1] Doyle v. City of Burlington Police Department, 2019 VT 66 ¶5 (citations omitted).
[2] See, Comments of Green Mountain Power, May 24, 2019, Case No. 18-3810
[3] HQ system power is supplied from a system of generating plants (e.g., the Hydro-Quebec Production system generation mix), as opposed to one or more specific generating plants.

amounts of renewable energy set forth in section 8005 of this title or without support of energy transformation projects. . ." A VDU may meet this renewable energy obligation through "eligible tradable renewable energy credits that it owns and retires, eligible renewable energy resources with environmental attributes still attached, *or* a combination of those credits and resources." (*emphasis supplied*). The language of this introduction is plain on its face and states that renewable attributes may be used to demonstrate achievement of the RES requirements (whether those attributes are purchased separately or purchased/generated along with the associated energy), and it specifically contemplates the use of attributes from plants located outside of New England.[4]

Section 8005(a) of Title 30, Tier I of the RES ("total renewable energy"), establishes the minimum total amounts of renewable energy a retail electricity provider must have in its supply portfolio and, reiterates that this obligation can be satisfied in two different ways:

> *To satisfy this requirement, a provider may use renewable energy with environmental attributes attached or any class of tradeable renewable energy credits generated by any renewable energy plant whose energy is capable of delivery in New England.*

30 V.S.A. § 8005(a)(1)(A). There would be no reason to distinguish between the use of tradeable RECs and the purchase of renewable energy with attributes attached if the statute did not allow the use of tradeable RECs purchased separately from energy to satisfy RES requirements.

In order to use environmental attributes to satisfy RES, there are two requirements: first, the attributes must be eligible, and second they must be tradeable RECs. The HQ attributes meet both requirements. Section 8002(21) defines eligible renewable energy as "...energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate. Hydroelectric energy sources generally qualify under this definition of renewable energy, and the statute specifically contemplates that renewable energy may be obtained from a system of generating resources (that is, a collection of plants - not only from individual generating plants), with the portion of that system that is considered renewable being limited to the portion generated by a technology that qualifies as renewable.[5]

The HQ attributes also are tradeable renewable energy credits. Section 8002(26) defines tradeable renewable energy credits as follows:

> *"Tradeable renewable energy credits" means all of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:*
>
> *(A) those attributes are transferred or recorded separately from that unit of energy;*
> *(B) the party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and*
> *(C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in any state and approved by the Commission.*

[4] 30 V.S.A. § 8002(21)(C).
[5] *Id.*

Renewable attributes associated with HQ system imports (whether purchased with the associated energy or unbundled) can clearly meet this definition. Specifically, the NEPOOL GIS tracks and monitors quantities of system energy delivered from Quebec into New England, and creates HQ system import certificates for those quantities. Purchasers under Vermont's existing long-term HQUS PPA regularly obtain attestations from the seller which identify the specific generation mix from which the deliveries were supplied; attest that Seller has not used the associated environmental attributes in some other way (e.g., transfer to another party, claim or represent the attributes elsewhere, use the attributes to meet another obligation); and attest that Seller is transferring its full interests in the attributes. These steps are used to establish Vermont's existing long-term HQUS PPA as a source of tradeable renewable energy credits that are eligible to help meet a utility's RES requirements that are tradeable and monitored on the GIS. The same steps can be used to establish that an unbundled purchase of attributes from the HQ system (in which case the associated quantity of energy was also delivered into New England, but ultimately sold to another energy buyer or into the spot market) are eligible for RES compliance.

Citing 30 V.S.A. § 8006, it has been suggested the Legislature intended only to allow HQ system attributes to qualify for the RES if the environmental attributes were bundled with a purchase of power, but this assertion reads language into 8006 that is not there, conflicts with the very clear provisions of sections 8002, 8004 and 8005 which specifically contemplate and authorize the use of *either* tradeable RECs *or* bundled purchases of renewable energy with environmental attributes attached for compliance with RES Tier I, and overlooks and conflates the stated purpose of each of these sections.

First, section 8006 does not state that HQ RECs or any other RECs must be purchased with the associated energy to satisfy the RES; nor would section 8006, which addresses a system for tradeable RECs, be the appropriate section for the Legislature to insert such language. The purpose of section 8006 is not to define tradeable RECs or identify which renewable energy is eligible for the RES- section 8002 addresses these issues. Its purpose also is not to explain how electric service providers can satisfy RES Tier I; that is the purpose of sections 8004 and 8005. The purpose of Section 8006(a) is to have the Commission *establish or adopt a system* of tradeable renewable energy credits for renewable resources that may be earned by electric generation qualifying for the RES. Section 8006 then lists three items this system must do:

- the system must "recognize tradeable renewable energy credits monitored and traded on the New England Generation Information System (GIS);
- the system must provide a process for the "recognition, approval, and monitoring of environmental attributes attached to renewable energy that are eligible to satisfy the requirements of sections 8004 and 8005. . . but are not monitored and traded on the GIS;" and
- the system must "otherwise be consistent with regional practices."

The fact that the system must "otherwise be consistent with regional practices" suggests the first two requirements for the system are not and should not be read to be exclusive. As explained in more detail below, it would be inconsistent with regional practices (and sections 8002, 8004 and 8006 of the RES) to require the bundling of tradeable RECs from eligible renewable energy with the purchase of that energy. Simply put, in order to be consistent with regional practices, the Commission's system must (and in fact already does) provide for tradeable RECs like the HQ system RECs whether or not they are purchased with HQ system energy.

Given that (1) the clear language in sections 8004 and 8005 establishing that RES Tier I can be satisfied with tradeable RECs or renewable energy with environmental attributes attached; (2) HQ RECs meet the definition of tradeable RECs under section 8002; and (3) HQ system energy is eligible renewable energy pursuant to section 8002, reading section 8006 as a prohibition on the use of HQ tradeable RECs (purchased separately from energy) to satisfy RES Tier I would require reading language into section 8006 that is not there and would thwart the legislative intent.[6]

The Commission also asked the parties to address section 8008 of the RES. Section 8008 addresses the sale by Vermont retail electricity providers of RECs from generation resources with a total plant capacity greater than 200 MW. By selling these RECs rather than retiring them, the VDU could not use them to satisfy RES Tier I so this section does not appear to have any bearing on the issue before the Commission - whether HQ system attributes must be bundled with the purchase of energy to be used to satisfy RES Tier I.

2. There are sound policy reasons supporting the statutory construct of the RES which allows tradeable renewable energy credits, including HQ RECs, to count toward Tier I regardless of whether they were purchased with the renewable energy.

GMP does not see any sound reasons to require environmental attributes from Hydro-Quebec be purchased with renewable energy as part of a power purchase. As discussed above, GMP believes that Vermont statutes clearly allow unbundled attribute purchases (including those backed by the Hydro Quebec system) to be used for compliance with RES Tier I requirements. In addition, GMP offers the following supporting observations:

- Requiring HQ system attributes to be purchased by a Vermont utility in combination with the same volume of energy purchases is not necessary to ensure that environmental attributes are not double counted, and are associated with energy that was actually delivered to New England. Retirement of NEPOOL GIS certificates equal to a specified volume of Quebec system import energy combined with appropriate supplier attestations with respect to that same volume of attributes, is sufficient to accomplish these policy goals.
- Requiring attribute purchases to be bundled with energy would be a significant divergence from regional practices with respect to demonstration of compliance with renewable energy requirements. Neighboring states measure compliance with RPS requirements through the retirement of RECs, irrespective of whether they are purchased with energy or separately.
- Requiring attribute purchases to be bundled with the purchase of energy would limit the flexibility of Vermont utilities to manage their power supply (including the achievement of RES requirements) in a low-cost way, and would effectively require GMP to purchase significantly more energy than it needs.

[6] Huntington v. McCarty, 174 Vt. 69, 73, 807 A.2d 950, 954 (2002)(citing In re Handy, 171 Vt. 336, 341, 764 A.2d1226, 1232-33 (2000)("In construing a statute to determine legislative intent, we look first to the language of the statute, presuming the plain and ordinary meaning of the language.. . It is inappropriate to read into a statute something which is not there unless it is necessary in order to make the statute effective."). Morin v. Essex Optical/The Hartford, 2005 VT 15, ¶ 7, 178 Vt. 29, 868 A.2d 729 (2005) (In interpreting a statute our overall goal is to give effect to the Legislature's intent...We do so by looking to the legislation's plain meaning, and we will not read terms into the statute unless necessary to make the statute effective.").

3. There would be adverse implications on Vermont customers, the RES, regional practices, and other generators if there was a requirement that HQ environmental attributes be bundled with renewable energy as part of a power purchase

a. Effects on Vermont Customers

GMP's primary concern with respect to effects on our customers is in the near term, since GMP has entered into unbundled HQ system attribute transactions for delivery in the next few years. GMP sought to secure a substantial volume of renewable supply at stable and reasonable prices during the early years of the RES program, to protect our customers from potential increases in the market price of Tier 1-eligible attributes. GMP's renewable needs were substantial (on the order of 1 million MWh per year), and we had energy sources including non-renewable market purchases in place to meet almost all of our customers' projected energy needs, so it made sense to purchase primarily unbundled attributes (without additional energy, most of which would not be needed to meet our customers' needs). HQ was a logical counterparty for a substantial block of renewable attributes; at that time it could commit to sell us renewable attributes backed by the HQ system. These attributes are associated with energy that is actually delivered into the ISO-NE control area; GMP therefore receives (and retires in its NEPOOL GIS account) Quebec System Import certificates for the corresponding volumes, along with attestations from HQ (equivalent to those described above for the existing long-term HQUS PPA). Deliveries under such transactions were included and approved as part of GMP's RES compliance filing for the year 2017.

Retroactive application of a requirement that HQ system attributes must be made together with energy would expose GMP customers to potentially significant costs associated with compliance year 2018, at a minimum. The NEPOOL GIS trading window for 2018 has closed, so if GMP were unable to rely on some of the unbundled attribute purchases that were delivered in 2018 we would not have an opportunity to seek purchases of replacement attributes, and our customers would be exposed to additional costs in the form of Alternative Compliance Payment ("ACP") obligations for the 2018 compliance year. Similarly, our committed HQ unbundled attribute purchase contracts include rights to receive deliveries through 2022 so such a requirement would significantly erode GMP's anticipated Tier 1 supply sources for those years. GMP therefore requests that if the PUC ultimately makes a determination (contrary to GMP's recommendation) that system import attribute transactions must be purchased along with energy, such a requirement should only apply to future transactions or take effect starting in 2022 or later.

Turning to potential future transactions, while the specific cost that a bundling requirement would impose on Vermont customers is uncertain, we do know that it would create some amount of additional costs. There is only a finite supply of attributes available in the region that are Tier I-eligible and not also eligible for one or more higher-priced markets (e.g., Massachusetts Class II), and HQ is one of the largest potential suppliers. GMP's understanding is that at present, attributes from HQ are only available through system-backed purchases. If hydroelectric attributes from Quebec were not available as a Tier I compliance source, the supply/demand balance of eligible sources in the region would tighten, leading to an increase of some significant amount in the market prices that GMP faces for its substantial Tier I purchase needs. This market is relatively concentrated, and not very transparent, so GMP does not presently have a reliable estimate of this market effect.

GMP's understanding is that HQ is presently working to develop a system to support plant-specific attribute hydroelectric transactions into New England – in part to support the planned sale of

hydroelectric energy into New England via the proposed NECEC line (which could be completed as soon as 2022). To the extent that HQ develops that capability in this time frame, it is possible that attributes associated with the fleet of hydroelectric generation in Quebec will become more widely available through transactions backed by individual plants as opposed to a system of plants.[7] That outcome could maintain the regional supply/demand balance of Tier I-eligible attributes, and limit the net costs that Vermont customers would face as a result of a requirement that HQ attributes and energy be purchased together.

Finally, GMP notes that the statute does not define what constitutes a "bundled" transaction in this context, so the cost of such a requirement would likely depend in part on how that requirement is defined.[8] Depending on those details, it is possible that GMP could continue to access system-backed attributes at limited additional cost through the structuring of such transactions (e.g., through the use of a floating price that follows actual ISO-NE spot market prices, or by promptly reselling required forward energy purchases that are in excess of GMP's estimated portfolio needs). At a minimum, however, additional transactions and associated transaction costs would be required.

b. Effects on the RES

GMP does not believe that there is a sound basis for requiring that system attributes be purchased together with energy, but our expectation is that if such a requirement were implemented with a reasonable lead time, it would not jeopardize the ability of Vermont utilities to achieve the RES requirements over the long-term. As discussed above, it is possible that the significance of renewable attribute purchases backed by system imports may decline over time as commercial alternatives emerge, and there are other options (e.g., other forms and sources of renewable purchases, retirement of RECs that might otherwise be sold for the benefit of our customers) that could be used to achieve the RES requirements. The primary concern is that adding constraints that limit access to a substantial source of renewable attributes could increase the net cost of RES compliance. As discussed above, the specific effects of a requirement that HQ system attributes be purchased with energy are uncertain. Because the volume of RES Tier I requirements is large (for GMP, the expected needs for additional renewable attributes in the long-term are on the order of 1 million MWh/year or more), even a moderate increase in the cost per MWh can have a noticeable effect on the net power costs that our customers pay.

c. How the Requirement Would Relate to Regional Practices

A requirement that renewable attributes for compliance with the Vermont RES must be bundled with a purchase of an equal amount of physical energy would mark a clear departure from regional practices. To our knowledge, RPS programs in other states all measure compliance of utilities and other retail suppliers based on the retirement of RECs, whether they were purchased together with energy from the underlying plant(s) or separately.

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[7] The Department's May 24, 2019 in Case No. 18-3810 (page 2) state that with respect to energy imports from Quebec, attributes cannot be assigned to specific generators. GMP's understanding is that attributes actually are assigned to specific generators through plant-specific transactions, and that significant volumes of plant-specific wind imports (including supplier attestations) have been used to meet RPS requirements in New England, but that HQ has not yet established the required metering and processes to support plant-specific hydroelectric transactions.

8 In order to establish a requirement that only "bundled" system import transactions should be eligible for RES compliance, it would presumably be necessary to define what a bundled transaction means in terms of the types of parameters (e.g., pricing structure, firmness, extent of required match with physical energy deliver volumes and locations, etc.) that can vary across energy contracts.

There are good reasons why states allow renewable attributes to be purchased and retired separately from energy. Unbundled trading of renewable attributes is broadly accepted and conducted in the electric industry and offers a number of commercial advantages that support the trading of renewable attributes and ultimately the financial support of new and existing renewables. For buyers, these advantages include simplicity (e.g., ability to purchase an agreed-upon volume of RECs without having to engage in the operations, scheduling, and other activities associated with the purchase of the associated physical energy) along with flexibility to purchase energy and RECs using transaction types, transaction timing, and suppliers that best fit their needs. At the same time, the NEPOOL GIS (supplemented where necessary by attestations from the neighboring Quebec control area, which presently lacks an attribute tracking system) is sufficient to accomplish the key policy objective of ensuring that attributes are not double-counted.

d. Potential Effects on Generators including the ability of Vermont utilities and generators to sell renewable energy credits to utilities in other states.

GMP appreciates the Commission's consideration of whether changes to Vermont renewable energy programs could (intentionally or not) erode the ability of Vermont utilities to sell RECs into the regional market, because such sales can and do reduce the retail electric rates that Vermont customers pay.

In the current instance, the PUC's determination with respect to whether purchases of system import attributes must be made along with energy does not appear likely to affect the ability of Vermont utilities to sell RECs to markets in neighboring states. At the core, this topic pertains to which types of renewable resources are eligible to meet Vermont renewable requirements and how compliance should be demonstrated. While Vermont's renewable requirements differ in some ways from neighboring states (including that RES requirements start much higher than neighboring states at 55%, and the renewable portion of a system-backed import is considered an eligible renewable source), these are only a couple of numerous differences in renewable energy eligibility and other program features across the New England states. A Commission determination of whether system-backed attributes from Quebec must be combined with energy purchases by a Vermont utility does not seem to meaningfully implicate the interests of neighboring states or the integrity of their renewable energy programs.[9]

Also, with respect to effects on generators, Vermont Electric Cooperative noted in its May 24, 2019 comments[10] that if a VDU were to purchase HQ attributes separate from a power purchase, there would be no increase in the flow of renewable generation into the region; that is not necessarily the case. While HQ's import/export decisions presumably depend on multiple factors, the presence of a market value for the renewable attributes (i.e., a revenue stream, adding to the market value of energy) would make it more profitable for HQ to schedule more imports to New England, versus other markets such as Ontario or New York. In the longer term, to the extent VDUs retire attributes associated with hydroelectric imports, that action will tend to increase the air emission profile of the residual energy mix in New England, and in turn the emission profile associated with electricity

[9] In contrast, Vermont's SPEED program (which featured goals for renewable generation volumes) like other New England states) posed a concern that RECs associated with a Vermont renewable source might be used to meet RPS requirements while the associated energy also was being counted toward a different goal in Vermont. That concern has since been addressed by Vermont's transition to the RES framework, which established renewable energy consumption requirements which are similar to those in neighboring states.

10 VEC May 24, 2019 Comments in Case No. 18-3810.

consumption in neighboring states (many of which are seeking to achieve greenhouse gas emission reduction goals). Thus, the retirement of low-emission attributes here in Vermont could contribute to stimulating additional emission-reducing actions (e.g., additional energy efficiency or renewable power sources) in neighboring states; to the extent this occurs, it will tend to back down marginal fossil-fuel fired generation in the region by some amount. Finally, we note that VEC's comment on this topic appears to suggest an additionality requirement that would not be appropriate in the context of RES Tier I which functions in part as a "maintenance" Tier that supports existing renewable generation sources.

B. Additional Comments

1. Administrative Costs

The Commission asked whether the Rule should include a definition of an "administrative costs" and, if so, what that definition should be. The Department of Public Service ("Department"), the utilities and other stakeholders have been involved in a collaborative process to address this and other issues. The Department circulated a proposal which recommended the RES rule stipulate that a common definition for administrative costs will be developed and used by the utilities, but that the definition itself need not be included in the rule. GMP supports this recommendation.

2. Load Growth and Tier III Plans

The Commission asked what should be included in Tier III annual plans regarding load growth to ensure load growth does not result in unnecessary transmission and distribution upgrades. The Department circulated a proposal, describing at a high level, mechanisms for tracking load growth relative to projections, and documenting how that growth is being managed through practical demand response measures. GMP generally supports this proposal and recognizes that there is the potential for uneven growth of these measures over time. Using a high level model of assumptions such as those included in a utility's Integrated Resource Plan ("IRP") could provide an illustrative view of how uneven growth might impact some circuits more heavily than others. In the utility's annual plan, the actual growth over time could then be compared to the forecast in the IRP. GMP also recommends that the load forecast for Tier III look no more than10 years into the future. Lastly, Tier III plans are required to identify demand management steps VDUs are putting into place whenever their Tier III projects create new load. This requirement should provide visibility on how potential growth impacts are being mitigated.

3. Cost-effectiveness Screening

The Department's proposal regarding administrative costs also includes an approach to cost-effectiveness screening. The Department does not recommend including additional language on cost-effectiveness screening in the Rule. GMP generally supports the Department's proposal but wishes to continue to work with the Department and other utilities regarding the need to ensure that cost-effectiveness screening against ACP is done at an appropriate level to ensure that worthy, innovative projects are not prematurely or inappropriately screened out of the program.

4. Personal identifying information in RES compliance filings.

GMP has not included customer personal identifying information in RES compliance filings and does not intend to do so in the future. GMP does not believe the RES statute requires disclosure of a customer's confidential information in compliance filings. Requiring the filing of confidential customer information, particularly customers' proprietary business information, could stifle customer participation in Tier III projects.

In conclusion, GMP appreciates the extensive work done by the Commission, the Department, VDUs and other stakeholders in this important rulemaking process for the RES.

Dated at Rutland, Vermont this 4th day of October, 2019

GREEN MOUNTAIN POWER

By: _____
Carolyn B. Anderson, Esq.
Associate General Counsel

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STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard	Case No. 19-2568-RULE

COMMENTS OF VERMONT ELECTRIC COOPERATIVE

Vermont Electric Cooperative (VEC) appreciates the opportunity to provide further comments on the draft rule addressing Vermont's Renewable Energy Standard (RES). Overall, VEC finds the draft rule to be a clear and concise distillation of the provisions in the previous orders. Please find VEC's comments below in response to the Vermont Public Utility Commission's (Commission's) request for additional comment.

Hydro Quebec Environmental Attributes

In previous comments, VEC expressed concern over allowing unbundled attributes from Hydro Quebec to count toward Vermont's RES. In those earlier comments, VEC failed to describe the key difference between unbundled attributes purchased directly from Hydro Quebec (HQ) with no association to actual energy delivered into New England versus unbundled attributes purchased from HQ or a third party that are associated with energy that was imported into New England.

In the case where unbundled attributes are purchased directly from HQ and not linked to energy that is delivered somewhere into New England, VEC believes that those attributes should not qualify under Tier I of Vermont's RES. Attributes in this specific case would not be tracked in NEPOOL GIS since HQ does not currently have its own system to track environmental attributes, nor would the purchase have any influence on the amount of energy that HQ ultimately decides to import into the region.

However, Green Mountain Power (GMP) raised some valid points in their previous comments on this topic that caused VEC to consider the more likely situation where a utility could purchase unbundled HQ attributes that are associated with energy imported into the region. This practice would actually be consistent with other attributes tracked in the NEPOOL GIS system and is clearly allowed under Title 30 of Section 8004(a) which states that retail electricity providers may meet their renewable energy requirements through "eligible tradeable renewable energy credits that it owns and retires, eligible renewable energy resources with environmental attributes still attached, or a combination of those credits and resources." Since attributes from HQ have clearly been deemed eligible under the RES, the question becomes whether or not the attributes are tradeable. Section 8002 (26) defines tradeable renewable energy credits as follows:

"Tradeable renewable energy credits" means all of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:

(A) Those attributes are transferred or recorded separately from that unit of energy;

(B) The party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and

(C) Exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in and states and approved by the Commission.

A typical example where unbundled attributes from HQ are tradeable might look like the following:

- A utility in another New England state purchases bundled energy directly from HQ. A Vermont utility then purchases the unbundled attributes originally associated with that same energy (and thus tracked in NEPOOL GIS) from the neighboring state utility.

Since energy imported into New England is tracked in NEPOOL GIS, Vermont utilities can easily track, trade, and retire HQ attributes that are associated with this imported energy, while avoiding the possibility of double-counting. Further, the incremental revenue that HQ and/or another New England utility would receive as part of the agreement to transfer the environmental attributes would provide additional incentive for increased imports into New England from HQ.

In it's annual RES filing, the VT utility would still be required to adjust their NEPOOL GIS HQ attribute totals by applying HQ's annual system mix attestation that confirms the exact percentage of HQ's system mix that came from renewable power for the corresponding year.

As GMP pointed out in their earlier comments, the ability of Vermont distribution utilities to purchase unbundled, trackable, environmental attributes provides flexibility to cost-effectively meet Vermont's RES requirements, while not unnecessarily exposing ratepayers to market price volatility by forcing utilities to purchase energy in excess of the utility's power supply needs. Since most Vermont distribution utilities hedge a large portion of their power supply portfolio to secure price stability, GMP is correct in stating that a requirement to allow attributes only from bundled energy purchases to qualify under Tier I of Vermont's RES would likely put ratepayers at increased risk for market price volatility, particularly if utilities have previously entered long-term power purchase agreements for energy from non-renewable energy sources.

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Administrative Costs, Tier III annual plans, cost effectiveness screening, alternative energy transformation projects, customer personal identification information.

- *Whether to include a definition of "administrative costs" in the rule and, if so, what that definition should be;*

VEC supports the definition offered by the Department and the suggestion that a reference to the definition be included in the rule but the definition itself not be included. This would allow for updates to the definition while ensuring uniformity in how utilities are calculating administrative cost.

- *What should be included in Tier III annual plans regarding load growth to ensure load growth does not result in unnecessary transmission and distribution upgrades;*

The key word in this question is "unnecessary." A shift to 90 percent renewable energy by 2050 will almost certainly require both transmission and distribution upgrades of the electric grid, as we transition from fossil fuels to electricity and other renewable sources. With the continued growth of net metering and efficiency, we expect overall load to be flat. However, load patterns will likely shift, in some ways predictably and others less so. We should employ strategies to incentivize flexible load wherever possible to ensure that we're using the grid efficiently and working to accommodate these fluctuations.

In its annual plans, VEC has included an estimate of the anticipated load growth from a particular technology as well as information about any strategies to manage this load. Over the past couple years, VEC has been exploring means of managing load, both of Tier III technologies such as electric vehicle chargers and previously existing load such as electric resistance water heaters. The most critical aspects of these programs are 1) identifying platforms that offer a range of options so that we are not required to interact with dozens of platforms; 2) testing the platform's functionality to ensure that it operates without stress or burden on the participant; and 3) identifying compatible technologies where the expected function will not be unduly affected (e.g. shutting off a cold climate heat pump during critical heating times thus forcing the building to use more fossil fuel).

VEC believes that the best approach for annual plans would be to require that utilities include information about expected load growth as well as any strategies to manage this load. Utilities will continue to undertake more detailed discussions of load growth and system improvements in their Integrated Resource Plans.

- *What, if any, additional provisions should be included in the rule regarding the cost-effectiveness screening portion of the RES requirements and the requirement that utilities evaluate alternative energy transformation projects that do not increase electric consumption;*

For utilities, the cost-effectiveness screening is simply whether an incentive can be offered for less than the Alternative Compliance Payment. Whether a technology is cost-effective to install is a consideration that happens on the customer side. This decision is informed by information provided by utilities as well as Efficiency Vermont, which provides additional technical assistance to VEC members on a regular basis, and installers, who actually provide a quote for the purchase and/or installation of a particular technology. The cost-effectiveness calculation for a customer would surely consider the cost of operating the particular technology versus whatever they are looking to replace, for example a cold climate heat pump to cut down on fuel oil for heating. However, there may be other factors that figure just as strongly in their decision-making process, such as comfort, the ability to use a heat pump for both heating and cooling, the availability of excess net metering credits, and a desire to curb fossil fuel use, among others. In this sense, the decision-making process on the customer side is often more qualitative than quantitative, and guidelines for these decisions cannot be prescribed through a rule.

The consideration of alternatives that do not increase electric usage is difficult to understand in the abstract, even more so when you consider that the decision ultimately belongs to the customer and not the utility that must provide information on this topic. However, VEC would be happy to comment in its annual plan on what is sees as possible alternatives to particular technologies. For example, cold climate heat pumps increase electric usage. One alternative is the status quo, where the participant continues to heat solely with propane or oil. Another alternative is a pellet stove, which increases electric usage but by a significantly smaller amount and for which VEC also offers an incentive. Yet another is a pellet boiler or furnace, which is a significantly more expensive undertaking. As mentioned above, there may be reasons that the customer chooses a cold climate heat pump over an option like a pellet stove that have nothing to do with cost or increases in electricity, for example they would like to use it for cooling or they aren't able to handle heavy bags of pellets.

- *What customer personal identifying information included in RES compliance filings, particularly filings regarding Tier III custom energy transformation projects, should be protected from public disclosure; and how the Commission should ensure that such information is protected.*

VEC believes that all personally identifying information should be protected, including name, account number, and address. Earlier this year, a Department representative came to VEC's office to review files for randomly selected Tier III participants. Through this process, customer information was protected and the Department was able to verify VEC's Tier III savings claims.

Thank you for the opportunity to comments on the draft RES rule. VEC looks forward to continued engagement in this process.

BURLINGTON ELECTRIC DEPARTMENT

VPPSA Vermont Public Power Supply Authority

October 4, 2019

Ms. Judith C. Whitney, Clerk
Vermont Public Utility Commission
112 State Street, Drawer 20
Montpelier, VT 05620

Re: Case 19 – 2568 Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard

Dear Ms. Whitney:

On July 3, 2019, the Public Utility Commission ("Commission") issued an Order requesting additional comments on the Commission's draft proposed Renewable Energy Standard ("RES") Rule. Burlington Electric Department ("BED") and Vermont Public Power Supply Authority ("VPPSA") have participated in the Commission process around this rulemaking and previously submitted written comments on the draft rule. BED and VPPSA now submit these supplemental comments and responses to the Commission's questions in its request for comments.

General Comments

The state and its electric ratepayers will be best served by a clear framework that is applied consistently and transparently across utilities. This will minimize confusion and help avoid having unnecessary costs incurred by ratepayers. As a general matter, the administrative burden of complying with RES should be kept to a reasonable level so that utilities can maximize their investment in procuring renewable resources and supporting customers' transition away from fossil fuels.

Response to the Commission's Questions Regarding Tiers 1 and 2

The Commission requested comment on whether, for purposes of compliance with the RES requirements, environmental attributes associated with renewable energy generated by Hydro Quebec must be purchased "bundled" with an energy purchase or whether the attributes may be purchased on their own, separate from an energy purchase. BED and VPPSA do not see a reason why environmental attributes from HQ generation would not be usable to comply with the RES. From an implementation standpoint, there is a need to establish a contract path to ensure that the utility using HQ attributes for RES compliance can demonstrate legal ownership of those

attributes and that no other entity would have a legal right to make such claims (and ideally that no other entity might mistakenly believe they can make such a claim).

Specific Comments on Tiers 1 &2 Provisions of the Draft Rule

BED and VPPSA offer the following comments and requests for clarification from the Commission on specific provisions of the Draft Rule.

Section 4.403

Consistent with other Commission Rules, it would be helpful if all words of multi-word defined terms/definitions were capitalized in section 4.403 and throughout Rule 4.400. For example, the definition of "Distributed renewable generation" includes several other defined terms (renewable energy, new renewable energy, plant capacity). Indicating that these terms have specific meaning in the Rule by capitalizing the first letter will help eliminate confusion in interpreting provisions of the Rule.

It might be helpful to separate the definitions of "REC" and "Environmental attributes" such that RECs refer to records in the GIS that satisfy one or more state RPS requirements - but without using the term "environmental attributes".

The terms "system of generating plants" and "system of generating resources" are used in the definition of "New renewable energy" and "Renewable energy" in a manner that may cause confusion. For example, what indicates that multiple generating plants, owned by a Vermont DU, do not constitute a "system of generating plants/resources"? A definition of "system of generating plants/resources" would be helpful. The term "specific and identifiable plant" in the definition of "New renewable energy is confusing" given the term "system of generating plants" immediately following.

Section 4.404

For consistency with industry use/contracting, in 4.404(a) we propose changing "GIS" to "NEPOOL-GIS". In section 4.404(b), "cannot be monitored" should be replaced with "are not monitored".

Does section 4.404(b)(2) effectively apply to the NYPA-Niagara resource as well as HQ? Also, the NEPOOL-GIS does not actually show "MWHs purchased from Hydro-Quebec"; it instead shows the amount of HQ system mix attributes that have been transferred to the entity in question, but MWH of energy purchased may differ. This section should perhaps be altered to read "MWH of HQ system mix attributes as tracked in the GIS".

Section 4.405

In section 4.405(a), we would propose changing "the tradable RECs" to "excess tradeable RECs" and in Section 4.405(b), we recommend reversing the priority between reserved and retired to make retirement the preferred state and reservation the alternative. Updates to the GIS subsequent to the start of this proceeding have reduced the need to use the reservation mechanism.

The use of the term "environmental attributes" versus "attributes" is not consistent. The language in section 4.405(c) seems to imply the ability to bank "environmental attributes" that are not associated with "tradeable RECs". Is this intentional?

Section 4.406

Should all Tier 2 resources be defined as qualifying for Vermont Tier 1 by default (given that Tier 2 is a subset of Tier 1 this seems reasonable)?

In section 4.406(a) - "facility" is not a defined term. Should the term "plant" be used instead?

In section 4.406(b)(1)(A), the list of fuel sources is not necessary. To the extent it is needed, it should be added to the definition of "Renewable energy". Also, is biomass combustion intentionally omitted from this list and the list in section 4.406(b)(1)(B)(iv)?

Should section 4.406(b)(2)(D) read "retail electricity provider or transmission company system"?

What types of resources is section 4.406 (c) intended to cover?

In section 4.406(d)(2)(A)(iv) should "capacity" read "plant capacity"?

Section 4.407

Should "representations of their generation portfolio" read "representations of their renewability"? We do not believe the RES compliance filing shows original sources of power as currently formed.

Response to the Commission's Questions Regarding Tier 3

Whether to include a definition of "administrative costs" in the rule and, if so, what that definition should be?

The Commission's Rule 4.400 should establish a structure for accurate and transparent accounting of the costs and benefits of the RES that can be applied as consistently as possible across the state's distribution utilities. It is important for policymakers to have a clear and complete understanding of what the RES is able to achieve and at what cost. VPPSA and BED have participated in meetings with the Department of Public Service (Department) and other utilities and generally support the Department's proposed definition of administrative costs developed in that context. We would, however, like to note that "administrative costs" are not unique to Tier 3, and that not all costs related to administrating RES compliance are Tier 3 related (i.e. the cost of administering Tier 3 is a subset of the costs of compliance with the RES).

We concur with the Department's broad definition of "administrative costs" and further agree that "Planning and Development" costs for new programs should be reported as administrative costs for planning/reporting purposes but *not* included when determining whether a Tier 3 project costs the utility less, per MWH, than the Alternative Compliance Payment ("ACP"). Including Planning and Development costs when evaluating a measure against the ACP could put utilities at risk of having

their Tier 3 projects deemed ineligible if costs were incurred in a given year but no savings (or a small amount of savings) were generated in that year. There are several scenarios in which costs can be incurred but no savings generated, and by definition those projects would cost the utility more, per MWH, than the ACP. Not including Planning and Development costs when comparing the cost of an energy transformation project to the ACP would allow utilities to devote scarce resources to innovative projects without the fear that they will be penalized if savings do not materialize immediately.

Likewise, to the extent that administrative costs include amounts for attending policy meetings with the Department, attending Commission workshops related to RES, and staff time drafting filings, these should not be included as administrative costs directly attributable to Tier 3. Including these labor costs as Tier 3 administrative costs would force utilities to choose between devoting funds to customer incentives or participating in regulatory proceedings.

What should be included in Tier III annual plans regarding load growth to ensure load growth does not result in unnecessary transmission and distribution upgrades?

Vermont's utilities prepare Integrated Resource Plans (IRPs) every three years. The IRP includes a load forecast and an analysis of the impacts of projected load growth on the distribution system. Tier 3 Annual Plans should reference the IRP load forecast and highlight any significant deviations from what was included in the IRP. The Tier 3 Annual Plan should not require utilities to recreate the IRP analysis on an annual basis.

What, if any, additional provisions should be included in the rule regarding the cost effectiveness screening portion of the RES requirements and the requirement that utilities evaluate alternative energy transformation projects that do not increase electric consumption?

For prescriptive measures, Section 4.409 (d) of the PUC's draft Rule 4.400 requires the Technical Advisory Group (TAG) to ensure that the "energy transformation measures that it analyzes and approves meet the requirements of 30 V.S.A. § 8005(a)(3)." Custom projects require the utilities to perform project analysis to demonstrate that the statutory criteria are met. Utilities may seek prior approval of energy transformation projects, but such approval is not required.

With regard to the evaluation of alternatives that do not increase electric consumption, utilities should explain in their Annual Plans the overall Tier 3 strategy, which may include examining the cost-effectiveness of electrification projects, electric sales, other Tier 3 eligible projects, and procuring additional Tier 2 RECs and how their planning models the cost and benefits of alternatives that do not increase electric consumption. Recognizing the ability to include net electric revenues in the screening and ACP tests allows utilities to model the relative value of such opportunities.

What customer personal identifying information included in RES compliance filings, particularly filings regarding Tier III custom energy transformation projects, should be protected from public disclosure; and how the Commission should ensure that such information is protected?

Personal identifying information should not be filed in RES compliance filings. The Department should have access to specific customer information for the purposes of conducting savings verification. Utilities should not be required to provide any personal identifying information in public filings. Project descriptions and savings values should be included in Tier 3 savings claims and, to the extent they are known, Annual Plans. Information that would identify a specific customer should not be included in either of these filings.

Specific Comments on Tier 3 Provisions of the Draft Rule

Section 4.409 (d)2 of the Draft Rule specifies that the TAG file the list of measures that it reviewed in the previous year by January 31st. In order to facilitate utility Tier 3 planning, the TAG should be required to submit this filing in advance of the utilities' Annual Plan submission on November 1st. BED and VPPSA suggest the deadline for the TAG measure characterizations be October 1st. It is our understanding that TAG currently completes its measure characterization work between May and October, so having measure characterizations due by October 1st should not require major modifications to the existing schedule. Having final measure characterizations in advance of utility Annual Plans being filed would help improve the accuracy of the Annual Plans.

4.416 Specific Types of Energy Transformation Projects

The Draft Rule contemplates presuming the Tier 3 eligibility of previously created savings from the state's weatherization assistance programs and establishing a set per MWH price for these savings. Should the Commission determine that this approach is consistent with 8005(a)(3)(C)(ii) and 8005(a)(3)(E)(ii), utilities should be permitted, but not obligated, to utilize these projects for Tier 3 compliance. VPPSA and BED would caution against including a specific $/MWH value in the RES Rule itself. As this appears to be a prescriptive approach to calculating savings, the per MWH cost should be calculated through a transparent process conducted by the Technical Advisory Group.

Thank you for your consideration of these comments. Please contact me (mbailey@vppsa.com or 802-882-8509) with any questions you may have.

Sincerely,

Melissa Bailey
Legislative and Regulatory Affairs Representative
Vermont Public Power Supply Authority

OEO's Recommended language for ePUC Submission | Regarding Rule 4.400

(2) Pay a rate per MWh Lifetime Energy Savings to a low-income weatherization provider that shall then be used by the low-income weatherization provider to fund low-income weatherization projects anywhere within the state, so long as the low-income weatherization provider provides low-income weatherization services within the retail electricity provider's service territory and the retail electricity provider contemporaneously advertises the low-income weatherization program services to it's customers or members. The MWh Rate shall be determined in accordance with the definitions and methodology outlined below. The MWh Rate shall be updated annually and the lesser of the calculated rate or the alternate compliance payment shall be established as the MWh Rate to be used for each calendar year.

Definitions & Methodology

HWAP
Home Weatherization Assistance Program

OEO
Vermont's Office of Economic Opportunity

DOE
United States Department of Energy

Mmbtu
One Million British Thermal Units

MWh
One Million Watt Hours

Heat Rate
The official conversion factor to translate from a representation of savings as Mmbtu to MWh. 9,213 btu per Kwh is the current conversion factor for 2020.

Project Lifetime
The Project Lifetime shall be determined for each weatherization project using an energy modeling software program approved for use by OEO and DOE.

Mmbtu Lifetime Savings Projections
Shall be determined for each weatherization project using an energy modeling software program approved for use by OEO and DOE

MWh Lifetime Savings Projections
Shall be determined by multiplying the projected Mmbtu lifetime savings from a Weatherization Project by the heat rate.

MWh Rate

The MWh Rate shall be updated annually by the OEO. The MWH Rate to be used for each calendar year shall be determined by:

1 | Summing the MWh Lifetime Savings Projections achieved by the HWAP during the most recently completed program year.
2 | Summing the Material and Onsite Labor costs incurred during the most recently completed program year as they are represented in the OEO and DOE approved energy modeling software.
3 | Divide the Material and Onsite Labor costs by the MWh Lifetime Savings Projections.
4 | Round up or down to the nearest whole dollar increment. The resulting figure after rounding is then established as the MWh Rate for the next calendar year.

An Example of Impact

This methodology would result in a Mwh Rate of $55.00 to use during the calendar year 2020. Using the HWAP program year 2019 energy savings projections as an example, this rate would yield $4,899,265.44 in Tier 3 sales with full participation in each weatherization project from all electric utilities.

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STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Docket No. 19-2568-RULE

Proposed Vermont Public Utility Commission Rule 4.400	)
Renewable Energy Standard	)

DEPARTMENT OF PUBLIC SERVICE COMMENTS REGARDING PROPOSED RULE 4.400, RENEWABLE ENERGY STANDARD

The Department of Public Service ("Department") submits to the Public Utility Commission ("Commission") the following comments regarding the Proposed Vermont Public Utility Commission Rule 4.400, the Renewable Energy Standard ("RES") Rule.

I. Environmental Attributes for Hydro Quebec

The Commission requested further comment regarding whether Hydro Quebec ("HQ") environmental attributes must be "bundled" with the underlying energy purchase. [1] The Department and Vermont Electric Cooperative, Inc. ("VEC") previously recommended that the environmental attributes must be bundled with the underlying energy purchase. The Green Mountain Power Corporation ("GMP") asserted that unbundled HQ attributes may be used for Vermont Tier I compliance. The Department elaborates below upon its arguments that HQ attributes must be bundled.

The Department first provides necessary background. Since the RES was implemented in 2017,[2] utilities have been able to comply with Tier I and Tier II obligations by purchasing renewable energy with the environmental attributes attached, or by purchasing tradeable

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[1] *Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard*, Case No. 19-2568-RULE, Order Requesting Comment on Proposed Draft Rule ("Order") at 3, July 3, 2019.

[2] *See Investigation re: Establishment of the Renewable Energy Standard program*, Docket No. 8550, Interim Order, March 15, 2016 ("Interim RES Implementation Order"); *Investigation re: Establishment of the Renewable Energy Standard program*, Docket No. 8550, Order Implementing the Renewable Energy Standard, June 28, 2016 ("RES Implementation Order") (collectively, "RES Implementation Orders").

renewable energy credits ("tradeable RECs") that can be tracked and certified on the New England Power Pool Generation Information System ("NEPOOL GIS" or "GIS"). Environmental attributes from Quebec (an adjacent control area) can be tracked but not certified in GIS, and they are not marked as Vermont Tier I or Vermont Tier II.

In 2016, the Commission approved a process to allow HQ energy purchases to qualify for Tier I:

> For HQ power purchases, RES compliance filings shall document the amount of MWh generation purchased from HQ as tracked in the NEPOOL GIS and then multiply this amount by the percentage of renewable energy contained in the HQ attestation form to determine the renewable power available for compliance with the RES.[3]

This process exclusively addressed "the tracking of environmental attributes **associated with the power purchased** from HQ and NYPA."[4] There was no discussion of unbundled HQ attributes in the RES Implementation Orders or the incorporated comments.[5] Therefore, shortly after the RES was enacted, there was a clear understanding that HQ attributes must be bundled. The Department maintains this is evidence of a general understanding, arising from legislative intent, that HQ attributes would only be allowed when attached to the HQ power purchased.

Currently, the environmental attributes associated with purchased HQ power can be used for RES compliance as long as the attributes are accompanied by an attestation from the seller verifying that the purchaser can claim ownership and renewability of the attributes, and that those attributes will not be sold or counted elsewhere. If the quantity of total attributes delivered to NEPOOL GIS is different than the number of renewable attributes eligible to be used for Tier I compliance, then the appropriate adjustments must be made, consistent with the Interim RES

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[3] Interim RES Implementation Order at 6.
[4] *Id.* (emphasis added).
[5] *See* Interim RES Implementation Order at 3–7; RES Implementation Order at 6–8.

Implementation Order. In seeking to use unbundled HQ attributes for 2018 Tier I compliance, GMP provided a letter from HQ verifying the sale of "attributes only" that were transferred as Quebec System Mix in GIS.

Returning to the questions posed by the Commission, it first requested "further comment and legal briefing on the relevant provisions in 30 V.S.A. §§ 8002, 8004, 8005, 8006, and 8008" as they apply to unbundled HQ attributes.[6] The Department maintains that unbundled HQ attributes are not allowed because statute requires that environmental attributes be attached to the associated renewable energy where, as with HQ, the environmental attributes cannot be certified in GIS.[7]

To comply with Tier I of the RES, "a provider may use **renewable energy with environmental attributes** attached or **any class of tradeable renewable energy credits** generated by any renewable energy plant whose energy is capable of delivery in New England."[8] Tier I therefore distinguishes between "renewable energy with environmental attributes attached" and "tradeable renewable energy credits" ("tradeable RECs"). This distinction carries into 30 V.S.A. § 8006(a), "Tradeable credits; environmental attributes; recognition, monitoring, and disclosure," which reads (emphasis added):

> The Commission shall establish or adopt a system of tradeable renewable energy credits for renewable resources that may be earned by electric generation qualifying for the RES. The **system shall recognize tradeable renewable energy credits monitored and traded on the New England Generation Information System (GIS)**; shall provide a process for the recognition, approval, and monitoring **of environmental attributes attached to renewable energy** that are eligible to

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[6] Order at 3.
[7] This is consistent with the Department's position that unbundled nuclear attributes may be used to increase the carbon-free portion of a utility's power portfolio, since nuclear attributes are tracked in NEPOOL GIS. *See* Comment by the Department of Public Service on Draft Renewable Energy Standard Rule, at 3–4, May 24, 2019, *Investigation into Renewable Energy Standard rulemaking*, Case No. 18-3810-INV.
[8] 30 V.S.A. § 8005(a)(1)(A) (emphasis added).

> satisfy the requirements of sections 8004 and 8005 of this title **but are not monitored and traded on the GIS**; and shall otherwise be consistent with regional practices.

Under this statute, the Commission's system shall recognize either "tradeable renewable energy credits monitored" in GIS, or "environmental attributes **attached to** renewable energy" that are **not** traded on GIS. Stated differently, tradeable RECs must be monitored in GIS; otherwise the environmental attributes must be attached/bundled to the underlying renewable energy. Since the HQ attributes cannot be certified or traded in GIS, the environmental attributes must be attached to the renewable energy. This is consistent with the RES Implementation Orders.

GMP relies on the statutory definition of "tradeable renewable energy credits" in allowing for unbundled attributes from HQ:

> [A]ll of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:
> (A) those attributes are transferred or recorded separately from that unit of energy;
> (B) the party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and
> (C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in any state and approved by the Commission.[9]

The definition is broadly written such that any utility could bypass the NEPOOL GIS tracking system by entering into a contract with a generator for attributes associated with that generation, along with an attestation from the generator.

It is important to note that the definition of "tradeable renewable energy credit" predated Act 56, which established the RES, and was not altered by that Act. Conversely, Section 8006

[9] 30 V.S.A. § 8002(26) (emphasis added).

was specifically modified to require the Commission to adopt a system of tracking RECs through NEPOOL GIS and a separate system for tracking environmental attributes that are not "monitored and traded" in NEPOOL GIS. This strongly suggests that the legislative intent of Act 56 was to require the use of NEPOOL GIS for tracking RECs but also providing a "process for the recognition, approval, and monitoring of **environmental attributes attached to renewable energy**[.]"[10]

This argument is further bolstered by the Connecticut Public Utilities Regulatory Authority ("PURA") review of Vermont's then-existing Sustainably Priced Energy Enterprise Development ("SPEED") program, which was occurring concurrently with the Vermont General Assembly's consideration of House Bill 40, which would become Act 56. PURA was determining whether to allow Vermont RECs to be counted toward Connecticut's Renewable Portfolio Standard; there was concern that Vermont's SPEED program resulted in double counting of the renewable attributes of certain generation. PURA's final decision was informed by the Department's filing in that proceeding that Vermont was working toward adoption of a renewable program that required retirement of RECs and specifically cited to the proposed new language in Section 8006 as being more consistent with other state renewable portfolio standard ("RPS") programs.[11]

The Commission next requested:

> a better explanation of the reasons for requiring environmental attributes from Hydro Quebec to be "attached" to renewable energy as part of a power purchase and the implications of such a requirement, including the specific effects on ratepayers, effects on generators (including the ability of Vermont utilities and generators to sell renewable energy credits to utilities in other states), effects on the

[10] 30 V.S.A. § 8006(a) (emphasis added).
[11] *Connecticut PURA*, Docket No. 15-01-03, Order of March 25, 2015 at 10. *See also* February 2, 2015 filing of the Department in Docket No. 15-01-03, including H. 40 as it existed at the time of filing.

> RES and Vermont's renewable energy goals, effects on Vermont's participation in the regional markets, and how the requirement relates to regional practices.[12]

As suggested by the Commission's range of questions, there are broad implications for allowing unbundled HQ attributes.

From a short-term perspective, ratepayers would see a modest rate benefit from the allowance of unbundled HQ attributes based on current market conditions, with long-term benefits less clear. A recent REC broker sheet indicated that vintage 2019 Vermont Tier I RECs could be purchased at a price of $1.25 per REC. Vermont's 2019 Tier I obligation, net of Tier II, is expected to be around 2,900,000 RECs. For illustrative purposes, consider an extreme example that assumes all Tier I obligations are met with the purchase of RECs. If unbundled attributes could be purchased for $0.25, not allowing for unbundled attributes would increase RES compliance costs by $2.9 million, which equates to about 0.3% rate impact. In an unlikely future, Vermont Tier I prices could approach the Alternative Compliance Payment ("ACP") of $10.60/REC in 2019, resulting in compliance costs $29 million greater than if unbundled HQ attributes at $0.25/REC could be used, and 3.2% of rate pressure. This example overlooks several details that are a reality in Vermont and could lessen the ratepayer impacts, including: utility ownership of existing renewable facilities; long-term power purchase agreements for Tier I-eligible facilities in ISO-NE, New York, and Quebec; and the voluntary retirement of Tier I RECs in excess of the requirement. Also worth noting is that one utility (GMP) has entered into long-term "attribute only" purchases from HQ; if unbundled attributes are not allowed for RES compliance, these additional costs would be absorbed by GMP rather than ratepayers.

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[12] *Id.* at 3-4.

The intent of the Tier I structure was to recognize the work that Vermont utilities had already done in procuring renewable resources from Quebec by allowing for the use of bundled HQ attributes, while also requiring additional renewable procurements. Allowing unbundled RECs to be used for RES compliance undermines Tier I of the RES by allowing for an unintended and cheaper route to compliance which could ultimately compromise the utilities' ability to sell RECs into other New England states, as argued previously in Connecticut.[13] Currently, no other states allow for the use of unbundled attributes from Quebec for RPS compliance, resulting in low demand and correspondingly low prices. However, in recent years, other states in the region, including Massachusetts and Connecticut, have made clean energy solicitations in an effort to move toward zero carbon energy. These solicitations have considered proposals to increase the amount of hydropower being imported into New England from Quebec, and would only consider bundled attributes to count toward progress in achieving emissions reductions. If Vermont becomes the regional outlier and allows unbundled HQ attributes as a cheaper alternative to achieving RES compliance while selling other RECs out of state at a higher price, other states may stop accepting Vermont attributes, compromising Vermont's ability to participate in regional markets.

Allowing unbundled attributes for RES compliance, as previously stated, would undermine both the RES and Vermont's renewable goals. If unbundled HQ attributes were utilized to the fullest extent, it could result in no additional renewable energy being imported into New England. Financial incentives associated with Tier I RECs are intended to incentivize

[13] *Connecticut PURA*, Docket No. 15-01-03, Order of March 25, 2015 at 10. *See also* February 2, 2015 filing of the Department in Docket No. 15-01-03, including H. 40 as it existed at the time of filing.

continued production by existing renewable generators in the region, yet this money would instead go to HQ. Ultimately, Vermont's increasing renewable electric mix would have no impact on the overall electric mix of the region.

II. Administrative Costs

The Commission requested comment on whether, "to include a definition of 'administrative costs' in the rule and, if so, what that definition should be[.]"[14] The Department maintains that the RES Rule should state that a common definition for administrative costs will be developed and used by the utilities, but that the definition itself need not be included in the Rule.[15] The Department proposes that the Commission's RES Compliance Spreadsheet[16]—as may be modified by the Commission from time to time—is the appropriate place to define and report administrative costs. In addition to stating that a common definition will be developed, the RES Rule should make clear how administrative costs should be applied.

The Department has coordinated with distribution utilities ("DUs") to work toward a common definition for administrative costs and its applicability. In pursuing a common definition, the Department is mindful of the purpose of Tier III, as articulated in 30 V.S.A. § 8005(a)(3), to encourage "Vermont retail electricity providers to support . . . other projects to reduce fossil fuel consumed by their customers and the emission of greenhouse gases attributable to that consumption." The Department has considered § 8005(a)(3) in light of Commission decisions regarding implementation of the RES. For example, the Commission has found that

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[14] Order at 5.
[15] This is consistent with previous recommendations. *See* Department of Public Service Comment Following March 19, 2019 Stakeholder Meeting, at 3, April 5, 2019, *Investigation into Renewable Energy Standard rulemaking*, Case No. 18-3810-INV ("Department's April 5th Comments").
[16] *Renewable Energy Standard 2018 Compliance*, Docket 19-0716-INV, Order Approving RES Data Collection and Compliance Spreadsheet, August 8, 2019.

"[a]ny cost/benefit analysis should" "include an examination of administrative and implementation costs," and that "[c]ost-effectiveness screening shall quantify: (i) administrative and implementation costs, including those costs associated with the TAG measure characterization, project design, and evaluation, measurement, and verification[.]"[17] The Commission has further clarified that "administrative and implementation costs shall be included when determining if an energy transformation project costs the DU less than the [Alternative Compliance Payment]."[18] The full costs of Tier III must be understood to ensure that energy transformation projects remain eligible to meet DU Tier III obligations, as well as to enable clear reporting to policymakers about the true costs of Tier III to ratepayers.

That said, reporting administrative costs should not unduly burden the innovation necessary to implement programs that meet the intent of Tier III. For example, if project design costs (those to consider, vet, and even pilot a project) are fully included in a single year of reporting, while only the savings from the initial measures installed have materialized—or no savings are accrued because the project is not fully launched—a project may appear to cost more than the ACP, or not screen as cost-effective. This approach could stifle innovation and prevent implementation of a beneficial program that is cost-effective in the long-term. To avoid this undesirable result, the Department recommends the following application of administrative costs be applied.

1) Include in reported administrative costs: Customer support; Program Implementation; Planning and Development; Legal; Reporting/Compliance, including annual plans and compliance report; Evaluation and Verification; Technical Advisory Group; Senior Management; Budgeting and Financial Oversight; Marketing; Overhead and/or Indirect Costs; and Fringe Benefits. These cost categories are

[17] RES Implementation Order at 24, 71.
[18] *In Re: Vermont Electric Distribution Utilities' 2018 Tier III Annual Plans*, Docket17-4780-INV, Order of March 15, 2018 at 7.

consistent with those reported by the State's Energy Efficiency Utilities. The Department recommends that all utilities report costs incurred in these categories for Tier III. The above categories of costs, collectively reported as "administrative costs," could be applied proportionally across different programs.

2) Planning and Development costs that are incurred on programs prior to being fully launched should be included in reporting of total Tier III costs and be *excluded* from cost-effectiveness screening or evaluation of costs relative to the ACP. These program start-up costs should not be solely determinative of whether a program is implemented.
3) Regulatory costs for participating in meetings, workshops, and PUC proceedings should be included in reporting of total Tier III costs and be *excluded* from cost-effectiveness screening or evaluation of costs relative to the ACP. These are costs that can be attributed to Tier III but they are not necessarily a cost that can be readily controlled by the utilities, so they should not be attributed to projects and cost-effectiveness screening.
4) Expected Planning and Development costs for projects prior to them being fully launched should be included in a DU's Tier III Annual Plan. This is expected to have the effect of limiting expenditures on programs that are extremely unlikely to materialize.

The Department's recommendation recognizes that DUs do not have a separate research and development budget, and that not all programs that are considered will be implemented, allowing for appropriate innovation while being mindful of cost.

III. Tier III Annual Plans Load Growth Estimates

The Commission requested comment regarding what "should be included in Tier III annual plans regarding load growth to ensure load growth does not result in unnecessary transmission and distribution upgrades[.]"[19] The Department previously recommended, "that the RES rule state that utilities' annual plans will include a discussion of the expected load growth from their Tier III offerings and the actions they will take to minimize these impacts to ensure they do not result in unnecessary transmission and distribution upgrades."[20] The Department

[19] Order at 4.
[20] Department's April 5th Comments at 4.

further stated that it would facilitate working sessions this summer to discuss what should be included in the Tier III annual plans regarding load growth.

Following collaborative discussions with DUs, the Department maintains that the RES Rule require the DUs to include a discussion and quantification of the expected load growth from their Tier III offerings and a discussion of load management strategies for Tier III offerings that increase electricity within their annual plans.

Depending on the measure mix, Tier III programs could have a direct substantial impact on marginal and peak loads over time, making it critical that these measures are implemented with an eye toward their aggregate impact to the electric system. It is also important for the DUs to detail the actions they are implementing or plan to take regarding load management in order to ensure they do not result in unnecessary transmission and distribution upgrades. While some load growth is expected due to the natural adoption of electro-technologies such as heat pumps and electric vehicles (both all-electric vehicles and plug-in hybrid electric vehicles), the DUs' Tier III obligations will result in faster adoption of these technologies in Vermont, with the increased pace dependent on the level of support offered by the DUs. The Department is mindful that the deployment of electro-technologies will not occur evenly across a utility's service territory. As such, it is important to understand how this type of clustered deployment will impact the distribution system.

The Department proposes the following framework for inclusion in Tier III annual plans and/or Integrated Resource Plans ("IRPs"):

1. Load Forecast:
    a. The utilities shall include a detailed load forecast in their IRP, which is completed every three years. The forecast used in the IRP shall include an analysis of the seasonal load impacts (after accounting for natural technology adoption) of its

Tier III programs, including impacts of Tier III at the time of system peak and Vermont's monthly peaks, and be informed by actual impacts as the programs mature.

b. The Annual Plan shall reference and incorporate the forecast developed in the IRP but does not need to duplicate that effort. The utilities should include in the Annual Plans any relevant updates or major deviations from the assumptions used in the IRP forecast.

2. Assumptions feeding the forecast

A process should be created that leverages the work of the Vermont System Planning Committee to identify appropriate, consistent forecast inputs across DUs. Assumptions to be developed include demand impacts, peak coincidence factors, and treatment of measures at end of measure life. These assumptions should be documented and updated as needed. This effort could also include the potential development of a demand savings tool to be used for custom measures using agreed-upon inputs. It is unlikely the tool would be customizable for every specific circumstance; however, it should, on average, yield appropriate results. DUs could also use modeling software to determine demand savings which would be vetted by the Department.

3. Load control and best practices

DUs should include a discussion of the measures available to control load, those they are implementing, and why the DU is (or is not) implementing them. This discussion should include consideration of whether the utility has or will have sufficient measure volume to warrant demand management activities and the load control measure's effectiveness, and its cost. Ideally, DUs will develop and adopt a common definition of "best practices" associated with load management. However, many areas of load control and other flexible load management are in nascent stages of development. Discussion of each DUs best practice in their IRPs and annual plans should illuminate best practices as they evolve. In the future, a clear "best practice" may emerge and that should be required. Until then, ensuring a thoughtful decision-making framework as described above should lead to positive results.

IV. Cost-Effectiveness Screening and Evaluation of Alternative Energy Transformation Projects

The Commission requested comment regarding what, "if any, additional provisions should be included in the rule regarding the cost effectiveness screening portion of the RES requirements and the requirement that utilities evaluate alternative energy transformation

projects that do not increase electric consumption[.]"[21] The Department previously recommended not including more specific requirements than what is already in the RES Rule regarding these issues, and stated it would facilitate working sessions this summer to determine what could be included in the cost/benefit analysis and the consideration of alternatives.[22]

Following a working session with the DUs, the Department recommends that, consistent with 30 V.S.A. § 8005(a)(3)(C)(iii), when implementing Tier III measures DUs should provide "an analysis of alternatives that do not increase electricity consumption." The Department suggests that the most logical place for this analysis is within the DU IRP process, incorporated into Tier III annual plans by reference and noting any major changes. The IRP outlines a decision-making framework that assures broad consideration of potential power supply and other utility efforts, and is conducive to this type of comparative analysis. Because DUs are in different stages of adoption, if an IRP is not completed prior to the next annual plan, the annual plan should contain the consideration of alternatives.

The Department's recommendation is informed by reading § 8005(a)(3)(C)(iii) in concert with 30 V.S.A. § 218c (least cost planning). Each provision contains the clause that services should be provided "at the lowest present value life cycle cost, including environmental and economic costs." This strongly suggests that evaluation of alternatives to electricity should be considered in the same manner as the IRP. Where material changes to assumptions used in the IRP are known, updated analysis should be provided in the Tier III annual plan.

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[21] Order at 5.
[22] Department's April 5th Comments at 4–5.

Dated at Montpelier, Vermont, this 4th day of October 2019.

VERMONT DEPARTMENT OF PUBLIC SERVICE

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STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-2568-RULE

Proposed Vermont Public Utility Commission
Rule 4.400 Renewable Energy Standard

COMMENTS OF GREEN MOUNTAIN POWER

In an October 8, 2019 Memorandum in the above-referenced matter, the Public Utility Commission ("Commission") requested responses to comments filed on October 2 and 4, 2019. Green Mountain Power ("GMP") appreciates the efforts of the various stakeholders, the Department and the Commission and is pleased to provide its responsive comments.

A. Hydro Quebec and Environmental Attributes.

GMP restates its October 4, 2019 and other filed comments that the Renewable Energy Standard ("RES") supports the use of Hydro Quebec ("HQ") hydroelectric system imports and their associated attributes, whether or not those attributes are bundled with an energy purchase, for compliance with RES Tier I. A few specific additional points are offered below:

First, GMP believes the policy intent of the RES statute is clear. Vermont's RES purposefully created a tiered framework to support its overall goals; the Vermont legislature expected Vermont Distribution Utilities ("VDUs") to mitigate the costs of Vermont's very aggressive overall goals through the appropriate use of the existing generation Tier I attributes, with the goal of encouraging carbon reduction at an overall lower cost. Tier 2 supports new, smaller, distributed generation within Vermont. The use of unbundled attributes within Tier 1 compliance does not undermine Tier 2 goals. The path for achieving affordable, impactful compliance with Vermont's aggressive RES goals was meant to include utilization of HQ environmental attributes, whether bundled or unbundled. Moreover, the utilization of unbundled HQ attributes for GMP's Tier I compliance does not distort the overall market availability of Tier 1 RECs or costs of other environmental attributes, especially given the substantial volumes of compliance GMP must achieve and the finite actual available supply of these attributes in New England. For context, GMP must aim to acquire roughly 1 million Tier 1 RECs per year, after accounting for committed long-term sources, to meet its Tier 1 requirements; that requirement increases significantly over time. All of the Deerfield/Connecticut River hydro attributes combined would amount to about 1.6 million Tier 1 RECs, and those account for a sizeable chunk of other Tier 1 attributes available to meet the existing renewables requirements of renewable portfolio standards ("RPS") programs throughout New England.

GMP believes that HQ attributes – whether bundled with an energy purchase or not - satisfy RES's definition of tradeable renewable energy credits.[1] GMP does not believe VDUs can bypass the NEPOOL GIS regarding unbundled attributes. While the RES does not expressly require use of the NEPOOL GIS for every source, both bundled and unbundled HQ attributes pass through the NEPOOL GIS system in the same manner. The NEPOOL GIS issues and tracks certificates. The certificates are created in the NEPOOL GIS, reflecting volumes of energy actually delivered into New England. Thereafter, both bundled and unbundled attributes receive an attestation from the supplier certifying that the energy associated with the environmental attribute quantities was in fact delivered into the New England market. This certification meets (and in fact surpasses) the requirements of the RES which requires only that the attributes be capable of delivery in New England. 30 V.S.A. § 8005(a)(1)(A). Additionally, the attestation certifies that the attributes were not (i) transferred to any other person; (ii) sold, claimed or represented as part of energy sold elsewhere or otherwise retired; or (iii) used to satisfy any other person's obligation in any program.[2] GMP's understanding is that plant-specific import transactions from Quebec that are used to meet Massachusetts Class 1 RPS requirements are supported by a supplier attestation to similar effect. GMP does retire the attributes in the NEPOOL GIS. Through this process the HQ attributes, whether bundled with energy or not, do not bypass the NEPOOL GIS, and there is no potential for them to be counted by two New England entities. To maintain the integrity of the system, GMP has recommended, and continues to recommend, that these attributes be retired in the GIS in the same manner other RECs are retired.

Second, we do not believe that allowing the use of unbundled HQ attributes will result in other states not accepting Vermont attributes. While Vermont faced some risk regarding Vermont based attributes prior to adopting its own portfolio standard, that risk has been addressed through the adoption of the RES and in any event did not concern the treatment of HQ unbundled attributes. The issue before the Connecticut Public Utilities Regulatory Authority ("PURA") in 2015 arose because of Vermont's unique position compared to other New England states before the RES was adopted: a Vermont generator recognized as a renewable energy source by Connecticut could originate RECs that could be counted toward the Connecticut RPS compliance notwithstanding the fact that Vermont did not have an RPS. At that time, the PURA stated:

> *It is this current dynamic, the fact that Vermont originates RECs within the GIS, but does not itself have an RPS, makes Vermont unique among New England states, and raises questions as to whether [Connecticut's RPS statute] is implicated.*[3]

The potential concern before the PURA was that Vermont's former SPEED goals were generation-based, and compliance was measured based on how much generation a VDU caused to happen (via

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[1] See GMP Comments dated October 4, 2019, Case No. 29-2568-RULE, at 2-3. A reading that would disallow the use of unbundled attributes would add meaningful cost to customers, is not in the statute's language, and is inconsistent with the statute's stated purpose:

> *Purpose; establishment. To encourage the economic and environmental benefits of renewable energy, this subdivision establishes, for the RES, minimum total amounts of renewable energy with the supply portfolio of each retail electricity provider. To satisfy this requirement,* ***a provider may use renewable energy with environmental attributes attached or any class of tradeable renewable energy credits generated by any renewable energy plant whose energy is capable of delivery in New England.***

30 V.S.A. § 8005(a)(1)(A) (emphasis added). GMP has read, and continues to read, the emphasized language as a complete phrase, not piecemeal, and with the statutory purpose and structure in mind. GMP also previously explained the other sound policy reasons supporting the use of unbundled HQ attributes for compliance with Tier I and incorporates those comments here.

2 See Attestations of Transfer included in GMP's May 24, 2018 RES compliance filing in Case No17-4632.

[3] Connecticut PURA, Docket No. 15-01-03, Order of March 25, 2015, at 5.

owned plants or PPAs) whereas other New England states had RPS requirements which were consumption-based, and compliance was measured through the retirement of RECs. In that circumstance, a volume of RECs from a Vermont generator for a given period could potentially have been used for compliance toward the Connecticut RPS requirements, while the underlying energy was being counted toward Vermont's generation-based SPEED requirement.

Vermont is no longer in this unique position. Vermont's RES framework, replacing the SPEED framework, was adopted after the Connecticut PURA docket in question. Vermont no longer defines renewable goals in terms of generation volumes. Vermont, like other New England states, measures compliance toward renewable requirements with the retirement of RECs as long as the energy associated with the RECs meets the statutory definition of renewable energy. Vermont determines what energy is considered renewable, and it has determined that HQ hydroelectric imports (whether supplied from specific hydroelectric plants or a system of plants) are renewable.[4] The fact that Vermont's RES allows the use of HQ attributes for compliance cannot undermine another state's RPS goals because the RES requires the retirement of RECs (which, by definition, can only be retired by one entity and applied toward one state's requirements). Similar to Vermont, other New England states allow unbundled attributes from Quebec for RPS purposes as long as the RECs are retired in NEPOOL GIS.[5] GMP has always retired its HQ attributes, whether bundled with energy or unbundled, in NEPOOL GIS just as it retires RECs from other renewable resources in the GIS. Any potential general concern over tracking HQ attributes should not be solved by disallowing them. If a concern exists, it is easily addressed by simply requiring the retirement of HQ attributes in NEPOOL GIS, as reflected in GMP redlines to the proposed rule.

Finally, and perhaps most importantly to Vermont customers, there would be meaningful adverse cost effects if the RES statute were read to preclude the use of unbundled HQ attributes for Tier I compliance. While GMP recognizes that the value of its tranche of HQ unbundled attributes likely is time-limited,[6] that value has been very important to GMP's efforts to control costs appropriately for its customers. Indeed, if GMP were unable to utilize such unbundled attributes, despite the already-approved RES compliance framework, the result would likely be a significant cost increase. GMP presently has contractual commitments on unbundled attributes through 2021, and may appropriately bank some of these attributes to meet RES requirements after that time, in order to help mitigate later cost pressures. GMP is actively seeking other sources of cost-effective Tier I RECs for its customers in the later years, and notes that the market will become even more constrained as surrounding states change their rules further to compete for cost-effective clean energy sources including HQ imports. While it is difficult to know what the specific cost would be to replace these substantial attribute purchases in a regional market that is relatively thinly traded and subject to increasing competition, and GMP would make every effort to limit those costs, they could amount to several million dollars per year.

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[4] 30 V.S.A. § 8002(21)(C), and see GMP Oct. 4 comments at 2.

[5] Both Massachusetts and Connecticut allow plant specific wind imports from Quebec as long as the energy was delivered into New England. A load serving entity demonstrates compliance with its Class 1 RPS requirements by retiring the associated RECs - irrespective of whether that load serving entity or another party purchased the underlying energy. GMP's understanding is that the supplier must also provide an attestation to ensure that the attributes have not been sold or counted elsewhere.

[6] In addition to other regular market fluctuations, we can expect specific value pressure on the cost of certain existing renewable attributes, including HQ, due to a pending proposed amendment in Massachusetts to the Clean Energy Standard (310 CMR 7.75) which would allow certain pre-2011 nuclear and large hydroelectric generators that have delivered sufficient quantities to Massachusetts since 2011 to qualify as "clean existing generator units" for purposes of satisfying a new "CES-E" tier in the Massachusetts RPS. See https://www.mass.gov/files/documents/2019/10/07/ces19-tsd_0.pdf. The practical effect of the Massachusetts rule, if adopted at the beginning of the year as currently contemplated, will be to drive up the costs of HQ environmental attributes.

B. Recommended revisions to the proposed rule.

GMP appreciates the Commission's proposed rule and the opportunity to comment on the offered redlines. In the attached documents (Attachment A and B), GMP provides proposed edits to the rule along with explanatory comments; with these changes, GMP believes the rule effectively accomplishes the goals of implementing the statute.

C. Comments regarding the Office of Economic Opportunity proposal for an annual Tier III MWH value for weatherization and for the establishment of pool of funds with utility contributions.

On October 2, 2019, the Vermont Office of Economic Opportunity ("OEO") filed comments proposing an annual MWH value for weatherization, and the use of utility contributions based on that value to establish a pool of funds to support weatherization efforts for low income customers. GMP recognizes that weatherization is a key component in energy efficiency, the effectiveness of new and legacy heating systems, and their resulting carbon footprint. Weatherization also is an important factor in the health and safety of homes. Additionally, GMP is focused on finding ways to leverage Tier III funding to reach low-income customers with decarbonization opportunities. However, GMP is not supportive of the OEO proposal as drafted for the following reasons:

The OEO proposal focuses on establishing a MWH value for weatherization that is close to the Alternative Compliance Payment ("ACP") (in its example, this would amount to $55/MWH for 2019). While the ACP represents a regulatory threshold for program costs, it does not represent guidance on how much a utility should spend per MWH. GMP seeks to achieve carbon offset goals in ways that represent the lowest cost to all utility customers, while supporting the cost-reducing benefits of load growth, and maximizing the carbon that is offset by those dollars.

The example offered in the OEO proposal sets up a pool of almost 5 million dollars. Assuming GMP's proportion at about 76%, would represent a much higher cost than GMP's entire Tier III budget for all programs in 2019. This would substantially raise the cost of Tier III compliance that would be passed onto GMP's customers, reduce the overall carbon impact of the program, and preclude support for other programs that offset more carbon at significantly lower cost per MWH.

GMP recognizes the importance of weatherization, and the need for additional funding to support weatherization projects for low income customers. While GMP cannot support the OEO proposal, we are open to exploring ways to coordinate with OEO, Efficiency Vermont, and key stakeholders to develop weatherization programs that can be supported through the Tier III program.

In conclusion, GMP appreciates the opportunity to provide these comments and the efforts of all stakeholders to develop the RES rule.

Dated at Rutland, Vermont this 1ST day of November, 2019

GREEN MOUNTAIN POWER

By: _____
Carolyn B. Anderson, Esq.
Associate General Counsel

19-2568
Attachment A
Comments GMP Redline of Draft Rule
November 1, 2019

Attachment A
Comments on GMP Redline of Draft Rule 4.400

In Section 4.404 (b):
The revisions to this section are designed to address a few issues. First, it is appropriate for all attributes that come from a control area that lacks an integrated GIS system to come with an attestation regardless of whether the renewable content is accurately reflected on the certificate or the attributes are monitored or traded on the NEPOOL GIS[1]. Further, as explained in our October 4, 2019 comments, NEPOOL GIS certificates for Hydro Quebec imports can be monitored and traded in GIS. GMP notes that it has purchased unbundled generation attributes associated with energy delivered into New England, and retired corresponding certificates in the GIS. However, the associated GIS certificates do not presently accurately represent the renewable content of the energy. Finally, the treatment of some renewable sources in the NEPOOL GIS may, and most likely will, evolve over time.

In Section 4.404 (b)(2):
This recommendation is intended to address a few points:

- Certificates for attributes associated with a system of generating resources from Quebec do not presently accurately reflect the renewable content of the energy so the documentation should also indicate the fraction of renewable content.
- The phrase "energy procured from" appears too restrictive because it could be read to indicate that in order for a VDU to use environmental attributes associated with Quebec imports to meet RES requirements, those attributes must be purchased together with an equal amount of energy.
- It is possible that in the future, attributes from a system of generating resources where the GIS certificates do not presently accurately represent the renewable content will be more accurately represented in the NEPOOL GIS and/or Quebec may develop a GIS system, obviating the need for an attestation. These changes could support the issuance of associated NEPOOL GIS certificates indicating (per acceptance by the Commission) eligibility for Vermont RES Tier 1.
- As discussed above, the rule should support the treatment of attributes that are purchased with energy or separately. VPPSA/BED made a similar recommendation in their October 4, 2019 comments.
- In case a supplier in Quebec other than Hydro-Quebec is able to deliver attributes backed by a system of renewable generating resources, we propose to refer to "supplier" rather than to Hydro-Quebec specifically.
- We recommend that these attributes or tradeable RECs used toward Tier I be retired in the NEPOOL GIS.

[1] For example, multiple wind plants located in Quebec and the Maritimes are qualified as RPS-eligible in Massachusetts and Connecticut, and receive NEPOOL GIS certificates evidencing this eligibility; it is GMP's understanding that these plant-specific attributes must be accompanied with a supplier attestations to ensure that the attributes have not been sold or claimed elsewhere.

19-2568
Attachment A
Comments GMP Redline of Draft Rule
November 1, 2019

In Section 4.405 (c)(1):
GMP recommends switching the order of "placed into a reserve account" and "retired." This suggestion is intended to indicate a higher relative priority of retiring attributes as opposed to reserving them; it appears to be consistent with a recommendation in VPPSA/BED's October 4, 2019 comments.

In Section 4.406 (a):
This recommendation is intended to accommodate the registration of aggregations or systems of renewable generating resources, and to allow flexibility with respect to the entity that initiates the qualification process for renewable generating plants.

In Section 4.406 (d):
GMP does not believe that it would be appropriate to limit aggregation of eligible renewable sources to net metered facilities. For simplicity and clarity of reporting, it is appropriate for a Vermont retail supplier to be able to utilize an aggregation of facilities other than net metering ones, and to be able to aggregate Tier 1-eligible resources. Examples of potential candidates for aggregation include small utility-owned renewable plants or PPAs for the output of renewable plants.

4.400 RENEWABLE ENERGY STANDARD RULE

TABLE OF CONTENTS

PART I: GENERAL PROVISIONS

4.401 Purpose and Background

(a) The purpose of this rule is to implement the Renewable Energy Standard ("RES"), established under 30 V.S.A. chapter 89, which requires Vermont retail electricity providers to acquire specified amounts of renewable energy in the form of tradeable renewable energy credits ("tradeable RECs") or environmental attributes and to achieve fossil-fuel reductions by implementing energy transformation projects.

(b) The RES is divided into three categories, known as Tiers.

(1) Tier I requires retail electricity providers to procure an amount of renewable energy equivalent to 55% of their annual retail electric sales for the year 2017, increasing by 4% every third January 1 thereafter, eventually reaching 75% in 2032.

(2) Tier II requires that a portion of the renewable energy that retail electricity providers procure to satisfy Tier I be from new renewable energy from distributed renewable generation resources. Under Tier II, retail electricity providers must procure an amount of new renewable energy equivalent to 1% of their annual retail electric sales from distributed renewable generation resources in 2017, increasing by three-fifths of a percent each year thereafter, eventually reaching 10% in 2032. For a retail electricity provider meeting the 100% renewable requirements of 30 V.S.A. § 8005(b), the provider may satisfy the Tier II requirements by accepting net-metering systems within its service territory pursuant to the provisions of Title 30 of the Vermont Statutes Annotated that govern net-metering.

(3) Tier III requires retail electricity providers to procure additional distributed renewable generation eligible for Tier II or to achieve fossil-fuel reductions from energy transformation projects equivalent to 2% of their annual retail electric sales in 2017, increasing by two-thirds of a percent each year thereafter, eventually reaching 12% in 2032. However, in the case of a retail electricity provider that is a municipal electric utility serving not more than 6,000 customers, the required amount for Tier III is 2% of the provider's annual retail sales beginning on January 1, 2019, increasing by an additional two-thirds of a percent each subsequent January 1 until reaching 10 and two-thirds percent on and after January 1, 2032.

(A) Any retail electricity provider may petition the Commission: (i) to reduce its Tier III requirement in any given year, or (ii) if the provider fails to achieve its Tier III requirement in a given year, to allow the provider to avoid paying the alternative compliance payment. The Commission shall apply the standards provided in 30 V.S.A. § 8005(a)(3)(G).

(B) For a retail electricity provider that meets the 100% renewable requirements of 30 V.S.A. § 8005(b) and has been appointed as an energy efficiency entity under 30 V.S.A. § 209(d), the provider may petition the Commission to reduce its Tier III requirement as provided in 30 V.S.A. § 8005(b).

4.402 Authority

This rule is adopted pursuant to 30 V.S.A. §§ 8001(b), 8004(b), and 8005(a)(3)(F).

4.403 Definitions

For purposes of this rule, the following definitions shall apply:

"Alternative compliance payment" means a payment made to the Vermont Clean Energy Development Fund established under 30 V.S.A. § 8015, in lieu of purchasing renewable energy, tradeable RECs or environmental attributes, or supporting energy transformation projects to satisfy the requirements of 30 V.S.A §§ 8004 and 8005 and this rule. The rates for alternative compliance payments are established pursuant to 30 V.S.A. § 8005(a)(4) and section 4.421 of this rule.

"Commission" means the Vermont Public Utility Commission or the Commission's duly authorized representative.

"Customer" means a retail electric customer.

"Department" means the Vermont Department of Public Service.

"Distributed renewable generation" means one of the following:

(A) a renewable energy plant that is new renewable energy; has a plant capacity of 5 MW or less; and

(i) is directly connected to the subtransmission or distribution system of a Vermont retail electricity provider; or

(ii) is directly connected to the transmission system of an electric company required to submit a Transmission System Plan under 30 V.S.A. § 218c(d), if the plant is part of a plan approved by the Commission to avoid or defer a transmission system improvement needed to address a transmission system reliability deficiency identified and analyzed in that Plan; or

(B) a net-metering system approved under the former 30 V.S.A. § 219a or under 30 V.S.A. § 8010 if the system is new renewable energy and the interconnecting retail electricity provider owns and retires the system's environmental attributes.

"Efficiency service providers" means entities providing energy efficiency services and programming, including the energy efficiency utilities, weatherization agencies, and affordable housing agencies.

"Energy conversion efficiency" means the effective use of energy and heat from a combustion process.

"Energy efficiency utility" means an entity appointed by the Commission pursuant to 30 V.S.A. § 209(d)(2) to provide energy efficiency programs and measures.

"Energy transformation measure" means a piece of equipment or system; a strategy intended to affect consumer energy use behaviors; or a modification of equipment, systems, or operations that reduces the amount of fossil fuel that would otherwise have been used. Examples include an individual cold-climate heat pump, heat pump water heater, or electric vehicle. Energy

transformation measures may be prescriptive measures approved in accordance with the processes established by section 4.409 of this rule or custom measures not previously approved under section 4.409.

"Energy transformation program" means all energy transformation projects administered by a retail electricity provider.

"Energy transformation project" means an undertaking that commenced on or after January 1, 2015, that provides energy-related goods or services but does not include or consist of the generation of electricity and that results in a net reduction in fossil fuel consumption by the customers of a retail electricity provider and in the emission of greenhouse gases attributable to that consumption. Examples of energy transformation projects may include home weatherization or other thermal energy efficiency measures; air source or geothermal heat pumps; high efficiency heating systems; increased use of biofuels; biomass heating systems; support for transportation demand management strategies; support for electric vehicles or related infrastructure; and infrastructure for the storage of renewable energy on the electric grid. Energy transformation projects may consist of: (1) one or more prescriptive energy transformation measures approved in accordance with the processes established by section 4.409 of this rule, (2) one or more custom energy transformation measures not previously approved under section 4.409, or (3) a combination of energy transformation measures from (1) and (2).

"Environmental attributes" or "attributes" means the characteristics of a plant that enable the energy it produces to qualify as renewable energy and include any and all benefits of the plant to the environment such as avoided emissions or other impacts to air, water, or soil that may occur through the plant's displacement of a nonrenewable energy source.

"Existing renewable energy" means renewable energy produced by a plant that came into service prior to or on June 30, 2015.

"GIS" means the Generation Information System, or its successor, operated by the New England Power Pool that is used to track and monitor tradeable RECs.

"kW" means kilowatt or kilowatts (AC).

"kWh" means kW-hour or hours.

"MW" means megawatt or megawatts (AC).

"MWh" means MW-hour or hours.

"New renewable energy" means renewable energy produced by a specific and identifiable plant coming into service after June 30, 2015.

(A) Energy from within a system of generating plants that includes renewable energy shall not constitute new renewable energy, regardless of whether the system includes specific plants that came or come into service after June 30, 2015.

(B) "New renewable energy" also may include the additional energy from an existing renewable energy plant retrofitted with advanced technologies or otherwise operated, modified,

or expanded to increase the kWh output of the plant in excess of an historical baseline established by calculating the average output of that plant for the 10-year period that ended June 30, 2015. If the production of new renewable energy through changes in operations, modification, or expansion involves combustion of the resource, the system also must result in an incrementally higher level of energy conversion efficiency or significantly reduced emissions.

"Plant" shall have the same meaning as in 30 V.S.A. § 8002.

"Plant capacity" means the rated electrical nameplate for a plant, except that, in the case of a solar energy plant, the term shall mean the aggregate AC nameplate capacity of all inverters used to convert the plant's output to AC power.

"Renewable energy" means energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate.

(A) For purposes of this definition, methane gas and other flammable gases produced by the decay of sewage treatment plant wastes or landfill wastes and anaerobic digestion of agricultural products, byproducts, or wastes, or of food wastes shall be considered renewable energy resources, but no other form of solid waste, other than silvicultural waste, shall be considered renewable.

(B) For purposes of this definition, no form of nuclear fuel shall be considered renewable.

(C) The only portion of electricity produced by a system of generating resources that shall be considered renewable is that portion generated by a technology that qualifies as renewable under this definition.

(D) The Commission by rule may add technologies or technology categories to the definition of "renewable energy," provided that technologies using the following fuels shall not be considered renewable energy supplies: coal, oil, propane, and natural gas.

(E) In this rule, renewable energy refers to either "existing renewable energy" or "new renewable energy."

"RES" means the Renewable Energy Standard established under 30 V.S.A. §§ 8004 and 8005.

"Retail electricity provider" or "provider" means a company engaged in the distribution or sale of electricity directly to the public.

"Technical Advisory Group" is a committee, originally established in relation to the energy efficiency utilities, which includes the Department, energy efficiency utilities, and retail electricity providers, that reviews and approves the methodology and associated assumptions underlying measure-savings calculations included in the Technical Reference Manual and provides approval of energy transformation measures.

"Technical Reference Manual" is a reference manual, established and maintained by the energy efficiency utilities in consultation with the Technical Advisory Group, that provides methods, formulas, and default assumptions for estimating energy and peak impacts, including

fossil-fuel savings, from measures and projects promoted by the energy efficiency utilities' energy efficiency programs and used by retail electricity providers for compliance with Tier III.

"Tier I" means the renewable energy requirements for retail electricity providers established under 30 V.S.A. § 8005(a)(1).

"Tier II" means the distributed renewable generation requirements for retail electricity providers established under 30 V.S.A. § 8005(a)(2).

"Tier III" means the energy transformation requirements for retail electricity providers established under 30 V.S.A. § 8005(a)(3).

"Tradeable REC" or "tradeable renewable energy credit" means all the environmental attributes associated with a single unit of energy generated by a renewable energy source where:

(A) those attributes are transferred or recorded separately from that unit of energy;

(B) the party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and

(C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in any state and approved by the Commission.

PART II: TIERS I & II

Field Cc

4.404 System for Tracking Compliance with Tiers I and II

(a) Pursuant to 30 V.S.A. § 8006(a), the principal mechanism for the tracking and monitoring of tradeable RECs qualifying for the RES shall be the New England Power Pool's Generation Information System, known as "GIS," or its successor.

(b) Retail electricity providers shall demonstrate their compliance with their Tier I and II obligations, as established under 30 V.S.A. §§ 8005(a)(1)(B) and (a)(2)(C), through ownership and retirement of tradeable RECs in GIS. If a provider uses environmental attributes or tradeable RECs from a control area that lacks a GIS system integrated with the NEPOOL GIS, that are ~~can~~not ~~be~~ monitored and traded in GIS, or for which the renewable content is not accurately represented on its GIS certificates, the provider shall demonstrate compliance as provided below.

(1) A retail electricity provider may demonstrate its compliance with the RES by means of environmental attributes or tradeable RECs from a control area that lacks a GIS system integrated with the NEPOOL GIS, that are ~~can~~not ~~be~~ monitored in GIS, or for which the renewable content is not accurately represented on its GIS certificates. A provider using these attributes or tradeable RECs ~~that cannot be monitored and traded in GIS~~ shall submit with its annual RES compliance filing documentation demonstrating that:

(A) it owns the attributes in question,

(B) the attributes are eligible for the RES, and

(C) the attributes have not been claimed in any other jurisdiction.

(2) In the case of attributes or tradeable RECs from a system of generating resources where the GIS certificates do not accurately represent the renewable content, the documentation shall also indicate the fraction of renewable content. ~~energy procured from Hydro-Quebec, so long as environmental attributes from Hydro-Quebec are not monitored and traded in GIS, a retail electricity provider shall submit with its annual RES compliance filing the information required by subdivision (1) of this subsection and documentation demonstrating its ownership of the environmental attributes associated with that energy through ownership and retirement of those attributes as they are tracked in GIS.~~ The value of the attributes or tradeable RECs toward Tier I requirements shall be determined by multiplying the MWhs ~~purchased from Hydro-Quebec~~ of the attributes as tracked in GIS by the percentage of renewable energy contained in the ~~Hydro-Quebec~~supplier's attestation form. The attributes or tradeable RECs used toward Tier I requirements shall be retired in the NEPOOL GIS.

4.405 Banking of Tradeable RECs and Environmental Attributes

(a) Pursuant to 30 V.S.A. § 8004(c), if a retail electricity provider has satisfied its Tier I and II obligations for a given year and has excess tradeable RECs or environmental attributes eligible for the RES, the provider may bank the tradeable RECs or attributes to use for compliance with the RES in one of the three years following the year in which the tradeable RECs or attributes were created.

(b) A retail electricity provider seeking to bank tradeable RECs or environmental attributes in excess of its Tier I and II obligations shall either place the tradeable RECs into a reserve account within GIS, if such a reserve account is available, or retire the tradeable RECs or attributes.

(c) A retail electricity provider's annual compliance filing shall include documentation demonstrating:

(1) the tradeable RECs and environmental attributes the provider has placed into a reserve account or retired, which the provider is banking for use in one of the following three years;

(2) the previously banked tradeable RECs and attributes the provider is using to satisfy its Tier I and II obligations for the compliance year;

(3) the previously banked tradeable RECs and attributes the provider is retaining for use in future years;

(4) for subdivisions (1) through (3) of this subsection, the year the tradeable RECs and attributes were created; and

(5) all other information required by the compliance spreadsheet, which must be included with the provider's annual compliance filing under section 4.419 of this rule.

4.406 Qualification of Generation Facilities for Tiers I and II

(a) A facility (which term includes an aggregation, or a system of generating resources) seeking to be qualified for Tier I or II of the RES shall have ~~submit a~~ a qualification registration or application submitted to the Commission pursuant to the requirements of this section. Facilities that qualify as a Tier I or II resource shall receive a statement of qualification from the Commission, and the Commission shall notify the GIS administrator of newly qualified facilities on a monthly basis.

(b) Registration Process.

(1) A facility that meets the following requirements may receive a statement of qualification by means of the registration process described below.

(A) For Tier I, a facility that produces renewable energy, as defined in this rule, using any of the following fuel sources: methane and flammable gases from food waste, agricultural waste, or other organic materials, or from decay of sewage or landfill wastes; geothermal; hydroelectric; marine thermal or hydrokinetic; photovoltaic solar; concentrated solar power; and wind.

(B) For Tier II, a facility that:

(i) has a system capacity of 5 MW (AC) or less,

(ii) is directly connected to the subtransmission or distribution system of a Vermont retail electricity provider,

(iii) came into service after June 30, 2015, and

(iv) produces new renewable energy, as defined in this rule, using any of the following fuel sources: methane and flammable gases from food waste, agricultural waste, or other organic materials, or from decay of sewage or landfill wastes; geothermal; hydroelectric that has received a water quality certification pursuant to 33 U.S.C. § 1341 from the Vermont Agency of Natural Resources after January 1, 1987, or from the Low Impact Hydropower Institute; marine thermal or hydrokinetic; photovoltaic solar; concentrated solar power; and wind.

(2) A facility seeking a statement of qualification through registration shall submit a complete registration on a form provided by the Commission, which shall include:

(A) Vermont certificate of public good number, if applicable,

(B) GIS identification number,

(C) plant capacity,

(D) the retail electricity provider system with which the facility is interconnected,

(E) the date the facility came into service, if the facility seeks to be qualified as a Tier II resource,

(F) fuel source, and

(G) any other information required by the Commission's registration form.

(3) A facility that complies with the requirements of Tier I or II and files a complete registration form by the 15th day of a month should receive a statement of qualification from the Commission within 15 days of the 15th day of the month; however, the expiration of this time period without the receipt of a statement of qualification does not constitute a determination that the facility is qualified. The Commission shall provide Tier I and II qualifications to GIS on a monthly basis.

(c) Application Process. For a facility not included under subdivision (b)(1) of this section that is seeking to qualify as a Tier I or II resource, the facility shall submit a complete application requesting a statement of qualification.

(1) The application shall be filed on a form provided by the Commission, which shall include all the information listed in subdivision (b)(2) of this section.

(2) The Department and the Vermont Agency of Natural Resources shall have 30 days from the date a complete application is posted on ePUC, the Commission's electronic filing system, to submit any comments on the application, including whether the Commission should conduct further proceedings to determine whether the facility should receive a statement of qualification.

(3) Following the 30-day comment period described above, the Commission may issue a statement of qualification, if the facility qualifies as a Tier I or II resource, or may open an investigation to determine whether such a statement should be issued.

(d) Aggregated Facilities. A Vermont retail electricity provider may seek to aggregate a group of ~~net-metered~~ facilities that qualify as Tier I or II resources as a single facility for purposes of monitoring and reporting the output of those facilities to GIS.

(1)(A) To aggregate a group of facilities pursuant to this subsection, a retail electricity provider shall submit an application to the Commission requesting a statement of qualification for its aggregated facilities, including the following information for each facility:

(i) address of the facility's location,

(ii) system capacity,

(iii) date the facility came into service,

(iv) fuel source,

(v) Vermont certificate of public good number, and

(vi) any other information requested by the Commission.

(B) In its review of an application for qualification of a group of aggregated facilities, the Commission may impose conditions related to the metering and monitoring of the output of the aggregated facilities, as appropriate.

(C) The Department shall have 30 days from the date a complete application is posted on ePUC, the Commission's electronic filing system, to submit any comments on the application.

(D) If the facilities qualify as Tier II resources and the retail electricity provider has submitted all the information required by this subsection, the Commission shall issue a statement of qualification for the aggregated facilities.

(2)(A) Following Commission issuance of a statement of qualification for a group of aggregated facilities, the retail electricity provider shall submit any modifications to its list of aggregated facilities on a quarterly basis for Commission approval. The update shall include:

(i) the GIS identification number for the previously approved aggregated facilities,

(ii) any modifications to the information regarding its previously approved facilities,

(iii) the information required by subdivision (1) of this subsection for each facility the provider is seeking to add to its aggregated facilities, and

(iv) the new total capacity of the provider's aggregated facilities if the Commission approves the update.

(B) A provider shall submit its quarterly updates as follows: for GIS quarter 1, by June 1; for GIS quarter 2, by September 1; for GIS quarter 3; by December 1; and for GIS quarter 4, by March 1. The Department shall have 20 days from the date a complete quarterly update is posted on ePUC, the Commission's electronic filing system, to submit any comments on the update. If the quarterly update complies with the requirements of this subsection, the provider should receive an approval from the Commission within 10 days of the date by which the Department must file its comments; however, the expiration of this time period without the receipt of an approval does not constitute a determination that the update is approved.

(e) Review of Tier I and II Facilities.

(1) Upon reasonable notice, the Commission or Department may audit a facility or group of facilities previously qualified as Tier I or II resources, including the inspection and copying of records, inspection of facilities, and other actions necessary to determine compliance with the RES.

(2) The Commission or Department may audit the accuracy of information, including electric generation information, reported to GIS for a facility or group of facilities approved under this section and may require the production of any records, documents, or relevant materials necessary to examine such accuracy.

(3) Upon notice and opportunity for hearing, the Commission may revoke a statement of qualification for a facility or group of facilities if it finds that a facility does not comply with the requirements of the RES or that the information submitted in the facility's registration or application form is not accurate.

4.407 Disclosures and Representations Regarding Retail Electricity Provider Generation Portfolios

(a) Pursuant to 30 V.S.A. § 8006(b), retail electricity providers shall base any representations of their generation portfolio on their most recently approved RES compliance filings.

(b) A retail electricity provider shall publish on its website a representation of its portfolio mix, which shall include:

(1) A representation of all sources contributing more than 1% of the retail electricity provider's generation portfolio, including a description of the fuel sources. In accounting for sources in its generation portfolio, the provider shall include generation from net-metered facilities;

(2) Appropriate categories to represent sources that do not individually exceed 1% of the generation portfolio; and

(3) A representation of the retail electricity provider's renewable energy portfolio following all tradeable REC and environmental attribute transactions as approved by the Commission in the provider's most recent RES compliance filing.

(c) Retail electricity providers shall annually provide notice to their customers of the availability of the above information by means of a bill insert, direct mail, e-mail, or other form of direct notice. This notice shall be provided within 90 days following the approval of a provider's annual RES compliance filing.

PART III: TIER III

4.408 Conversion Method for Fossil-Fuel Savings from Energy Transformation Projects

(a) Pursuant to 30 V.S.A. §§ 8005(a)(3)(D) and 8005(a)(3)(F)(i), for the purpose of determining the eligibility and the application of an energy transformation project's fossil-fuel savings to a retail electricity provider's annual requirement, the provider shall convert the net reduction in fossil-fuel consumption resulting from the energy transformation project to a MWh equivalent of electric energy using the most recent year's approximate heat rate for electricity net generation from the "total fossil fuels" category as reported by the U.S. Energy Information Administration in its Monthly Energy Review.

(b) Retail electricity providers shall use a publicly available spreadsheet, provided and maintained by the Department, to determine the MWh-equivalent energy values. The Department shall update the spreadsheet on an annual basis with the appropriate U.S. Energy Information Administration values.

(c) If an energy transformation project is funded by more than one regulated entity, the reduction in fossil-fuel consumption shall be pro-rated among the regulated entities that funded the project. For purposes of this section, "regulated entity" includes the retail electricity providers and energy efficiency utilities.

4.409 Process for Prior Approval of Energy Transformation Measures

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(ii), this section establishes a process for prior approval of energy transformation measures.

(b) The Technical Advisory Group, originally established in relation to the energy efficiency utilities, shall administer the process for prior approval of energy transformation measures. The Technical Advisory Group includes the Department, the energy efficiency utilities, and the retail electricity providers.

(c) All Technical Advisory Group meetings related to energy transformation measures shall be noticed and open to the public, and time shall be included in each meeting agenda for public input.

(d) The Technical Advisory Group shall:

(1) file with the Commission its analysis of how energy transformation measures that it analyzes and approves meet the requirements of 30 V.S.A. § 8005(a)(3);

(2) file with the Commission, by no later than January 31 of each year, a list of measures that it reviewed during the previous calendar year; and

(3) include in its filing with the Commission appropriate information documenting the eligibility determinations that it has made for each measure.

(e) The Technical Advisory Group administrator may seek to recover its costs for participating in the Technical Advisory Group process as it relates to energy transformation measures. The Technical Advisory Group administrator shall allocate such costs to each obligated retail electricity provider based on the provider's pro-rata share of annual retail electric sales in Vermont. The Technical Advisory Group administrator may enter into bilateral arrangements with obligated providers as a manner of recovering such costs.

(f) Retail electricity providers may submit potential energy transformation measures directly to the Technical Advisory Group for review, characterization, and prior approval. For those potential energy transformation measures that are not immediately sponsored in the Technical Advisory Group process by a provider, a measure proponent may present its measure to the Department for an initial review. If the Department concludes that the measure may be viable as an energy transformation measure, the Department may share its review and conclusions with the providers, who may determine whether to pursue full evaluation of the measure through the Technical Advisory Group process. The Department may also sponsor a measure for Technical Advisory Group review itself.

(g) A retail electricity provider may petition the Commission for an alternative process for prior approval of potential energy transformation projects in lieu of obtaining prior approval of an energy transformation measure through the Technical Advisory Group process.

(h) There is no obligation for a retail electricity provider to obtain prior approval of its energy transformation projects.

(i) A retail electricity provider that commenced a project prior to approval of the project as an energy transformation measure through the Technical Advisory Group process may still seek approval of the measure from the Technical Advisory Group.

4.410 Cost-Effectiveness Screening of Energy Transformation Projects

Pursuant to 30 V.S.A. §§ 8005(a)(3)(C) and 8005(a)(3)(F)(iii), for purposes of cost-effectiveness screening of energy transformation projects, a retail electricity provider shall only offer energy transformation projects that meet the following criteria:

(1) For efficiency measures that may be offered by energy efficiency utilities pursuant to 30 V.S.A. § 209(d), including those measures identified in the Technical Reference Manual, the retail electricity provider shall assess the eligibility of an energy transformation project that is an efficiency measure using the statewide cost-effectiveness screening tools provided by the Department.

(2) Over the energy transformation project's life, the project shall result in a net reduction in fossil fuel consumed by the retail electricity provider's customers and a reduction in the emission of greenhouse gases attributable to that consumption, whether or not the fuel is supplied by the provider.

(3) The energy transformation project shall meet the need for its goods or services at the lowest present-value life-cycle cost, including environmental and economic costs. This evaluation shall include an analysis of alternatives that do not increase electric consumption.

(4) Cost-effectiveness screening shall quantify:

(A) administrative and implementation costs, including those costs associated with the Technical Advisory Group's measure characterization, project design, evaluation, measurement, and verification; and

(B) costs and benefits associated with increased electric sales and financing and lease income.

(5) Each energy transformation project, including an energy transformation project identified as cost-effective through the statewide cost-effectiveness screening tool, shall in total cost the retail electricity provider less per MWh of energy savings than the applicable alternative compliance payment.

(A) The total cost of an energy transformation project shall include administrative and implementation costs.

(B) A retail electricity provider may use net costs when assessing whether an energy transformation project costs less than the applicable alternative compliance payment. If a provider uses net costs, the provider shall provide the assumptions used in its analysis of net costs.

(6) A retail electricity provider's Tier III annual plan, required under section 4.417 of this rule, shall include reporting on cost/benefit accounting at the energy transformation program level, including cost/benefit analyses for purposes of future-year planning when possible.

4.411 Banking and Trading in Tier III

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(iv), retail electricity providers may bank any unused fossil-fuel reductions from energy transformation projects for compliance in future years. However, pursuant to 30 V.S.A. § 8004(c), Tier II tradeable RECs and environmental attributes that have been banked may only be used in one of the following three years whether they are used to satisfy a Tier II or Tier III obligation.

(b) In its annual compliance filings, a retail electricity provider shall:

(1) document any excess Tier III fossil-fuel reductions that it seeks to retain for compliance in future years;

(2) indicate any Tier III fossil-fuel reductions from prior years that it seeks to claim to meet its current year compliance obligation;

(3) indicate whether and which Tier II credits it seeks to apply towards its Tier III obligations in the current year; and

(4) provide documentation of the current amount of banked Tier III fossil-fuel reductions held by the provider.

(c) Trading of Tier III fossil-fuel reductions is prohibited.

4.412 Evaluation, Measurement, and Verification of Energy Transformation Projects

Pursuant to 30 V.S.A. § 8005(a)(3)(F)(v), to establish and validate an energy transformation project's claimed fossil-fuel reductions, avoided greenhouse gas emissions, conversion to MWh equivalent, cost-effectiveness, and, if applicable, energy savings, the following documentation and verification process shall be employed:

(1) The Department shall conduct an annual savings verification to assess retail electricity providers' annual savings claims. The Department shall work with providers to attempt to resolve any issues that may lead to adjustments to providers' annual savings claims.

(2) Savings verification shall include an analysis of project data from retail electricity provider tracking systems, review of project files, and any necessary field verification visits.

(3) For energy transformation projects, where savings assumptions have not been established through the Technical Reference Manual or do not apply, a retail electricity provider shall maintain in its files documentation of all assumptions and calculations used to establish its savings claims.

(4) By March 15 of each year, a retail electricity provider shall submit a report to the Commission and the Department stating its savings claims for its energy transformation projects for the previous year. The report shall also include energy transformation project participation, spending, and benefits by customer sector (residential, commercial and industrial, and low-income), as required by section 4.413(c)(1) of this rule. The Commission shall provide a summary table template, created in collaboration with the Department and providers, to be included in the report. A provider's annual report shall include a completed summary table.

(5) By June 1 of each year, the Department shall provide recommendations to the Commission regarding the verified savings achieved by retail electricity providers for the previous year.

(6) Within 15 days of the Department's recommendation each year, retail electricity providers and other interested parties may offer comments on the Department's recommendation to the Commission.

(7) If the Department or any interested party recommends that the Commission reject any of a retail electricity provider's energy transformation project fossil-fuel savings or if the Commission finds that a provider's savings claims do not comply with the requirements of the RES statute or rule, the Commission shall, by August 20 of each year, either issue an order accepting or rejecting those savings claims or issue an order notifying the provider that the Commission is still considering whether those particular savings claims comply with the RES statute and rule. If the Commission is still considering whether the savings claims comply with the RES statute and rule, the provider's compliance filing required under section 4.419 of this rule need not address that specific portion of the provider's Tier III obligation still under consideration. Once the Commission rules on the particular savings claims, if the Commission determines that the savings claims do not comply with the RES statute or rule, the provider shall have 30 days to file alternative Tier III savings claims, Tier II tradeable RECs or environmental attributes, alternative compliance payments sufficient to satisfy the portion of the provider's Tier III obligation that the Commission rejected, or, pursuant to section 4.401(a)(3)(A) of this rule, a request for a reduced Tier III obligation.

(8) Retail electricity providers' Tier III annual plans, required under section 4.417 of this rule, may include an evaluation, measurement, and verification plan, including estimated plan costs. Providers are encouraged to consult with the Department in advance of filing their Tier III annual plans to develop estimated evaluation, measurement, and verification plan costs.

(9) Evaluation, measurement, and verification costs may be billed to retail electricity providers using the Department's authority to allocate expenses pursuant to 30 V.S.A. § 21 and shall be allocated proportionally based upon the costs to evaluate each retail electricity provider's share of energy transformation projects. For partnership programs between a provider and an energy efficiency utility, costs may be allocated according to an agreed-upon cost-allocation methodology.

(10) In addition to annual savings verifications, the Department shall conduct periodic evaluations of energy transformation projects or classes of projects.

(11) Changes to energy transformation project savings claims resulting from periodic evaluations shall not retroactively reduce claims made on behalf of a measure approved pursuant to section 4.409 of this rule or reduce verified claims carried forward pursuant to section 4.411 of this rule. However, such changes may be applied to the treatment of savings claims from projects undertaken in future years.

4.413 Equitable Opportunity to Participate in and Benefit from Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(vi), all ratepayers shall have an equitable opportunity to participate in and benefit from energy transformation projects, regardless of rate class, income level, or provider service territory.

(b) A retail electricity provider that chooses to meet any portion of its Tier III obligations through energy transformation projects in a given year shall make energy transformation project opportunities available to all ratepayers, regardless of rate class or income level.

(1) For purposes of this rule, rate class shall be broadly defined as customer class or sector – that is, residential customers and commercial and industrial customers.

(2) For purposes of this rule, income level shall be broadly defined as low-income and non-low-income.

(A) A low-income customer shall be defined as a customer whose household income is at or below 80% of Vermont statewide median income.

(B) The percentage of low-income households in each retail electricity provider's service territory shall be assumed to be the statewide percentage of low-income households.

(C) The Department may provide the statewide percentage of low-income households to the providers on an annual basis for the purposes of planning and tracking their energy transformation projects.

(D) A provider may petition the Commission for an alternative definition of "low-income customer," and for a different percentage of low-income customers to be applicable to its service territory. Any such petition must demonstrate why an alternative definition or percentage is necessary based on the unique circumstances of the provider and its customers.

(c) Tracking Equitable Opportunity.

(1) A retail electricity provider shall track and report energy transformation project participation, spending, and benefits by customer sector (residential, commercial and industrial, and low-income) in each year that it chooses to meet any portion of its Tier III obligations through energy transformation projects.

(2) Consideration of whether a provider has provided equitable opportunities to its customers shall be measured over the course of the RES program.

(3) A provider shall endeavor to provide equitable opportunities to its customer sectors in rough proportion to each customer sector's annual retail sales.

(4) A provider may petition the Commission for alternative measurement criteria. Any such petition must demonstrate why alternative measurement criteria are necessary based on the unique circumstances of the provider and its customers.

(d) When offering energy transformation projects, a retail electricity provider must provide information, such as up-front costs, benefits, long-term maintenance, options available to overcome first-cost barriers, and other efficiency and energy support services available, that is consistent, transparent, and unbiased. When an energy transformation project is being offered in more than one service territory, the providers shall ensure, as part of their coordination, that all such information is provided in a consistent manner.

(e) A retail electricity provider may provide equitable opportunities to its customers through participation in statewide initiatives, such as a standard suite of energy transformation projects or a common set of technologies.

4.414 Coordinated Delivery of Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(vii), in developing energy transformation projects and programs to implement those projects, retail electricity providers shall coordinate with other energy efficiency services and programming, including the energy efficiency utilities, weatherization agencies, and affordable housing agencies (collectively, "efficiency service providers").

(b) In retail electricity providers' Tier III annual plans, required under section 4.417 of this rule, retail electricity providers shall demonstrate their efforts to collaborate with efficiency service providers. Outside of the annual planning process, retail electricity providers shall continue to share information about energy transformation project and program elements, such as incentive structures and marketing and implementation strategies, with other retail electricity providers and efficiency service providers.

(c) In developing energy transformation projects and programs to implement those projects, retail electricity providers shall seek to efficiently utilize the resources of other retail electricity providers and efficiency service providers.

(d) When efficiency service provider projects and retail electricity provider projects overlap due to similar measures, projects, or programs, the providers shall work together to negotiate reasonable allocations of savings and costs to be included in the Tier III annual plans and accounted for in the annual compliance reports for Commission review. Should providers be unable to reach a consensus, providers may petition the Commission for a resolution. In addition, the Department may assist providers in the mediation of disputes related to the allocation of costs and savings.

(e) Efficiency service providers and retail electricity providers may enter into agreements to share resources across a retail electricity provider's service territory in order to efficiently utilize staff and resources, and these agreements may result in single-point-of-contact services for some energy transformation projects and programs to implement those projects.

(f)(1) Retail electricity providers or their partners in offering energy transformation projects and programs to implement those projects shall advise customers of:

(A) the up-front costs, benefits, and long-term maintenance requirements for customer-appropriate technologies,

(B) options available to overcome first-cost barriers to participation, and

(C) other efficiency and energy support services available.

(2) Retail electricity providers or their partners in offering energy transformation projects shall make customer referrals for additional information or special services.

4.415 Best Practices and Minimum Standards

Pursuant to 30 V.S.A. § 8005(a)(3)(F)(viii), if an energy transformation project increases the use of electric energy, the project shall incorporate best practices for demand management, use technologies appropriate for Vermont, and encourage the installation of the technologies in buildings that meet minimum energy performance standards. To meet this requirement, retail electricity providers shall follow and comply with the following provisions.

(1) Best practices for demand management may include:

(A) the enrollment of a participating customer in an advanced rate program. Advanced rates may include critical peak pricing, time-of-use rates, or controllable load rates or riders;

(B) verifying a high level of building performance to reduce electric demand; or

(C) non-monetary behavioral programs to avoid electricity use during peak days or hours.

(2) Customer and contractor education shall include the advantages and disadvantages associated with an energy transformation project, considering, as applicable, building or vehicle characteristics, fuel types, prices, and customer economics. Education, outreach, and marketing shall aim to deliver uniform statewide messaging and maximize existing state resources.

(3) Marketing information presented to customers on savings associated with energy transformation projects shall be accurate, reflect current fuel prices, and address customer-specific conditions.

(4) A retail electricity provider seeking to verify that an energy transformation project meets minimum building performance standards shall assess the participating customer's building using the building performance model provided by the Department. The building performance model shall be developed and updated regularly through the Technical Advisory Group process.

(5) The savings that a retail electricity provider may claim for the installation of a prescriptive energy transformation measure in a building achieving minimum energy performance standards shall be determined through the Technical Advisory Group process.

(6) For a retail electricity provider implementing energy transformation projects that increase the use of electric energy, the provider's Tier III annual plan shall include options for best

practices for demand management; strategies for encouraging the installation of technologies in buildings that meet minimum energy performance standards, as applicable; and strategies for customer education, outreach, and marketing.

4.416 Specific Types of Energy Transformation Projects

Low-income Weatherization. If proposing a low-income weatherization energy transformation project, a retail electricity provider may:

(1) purchase previously created verifiable energy savings from a low-income weatherization provider, authorized under Vermont statute, so long as the energy savings were created during the compliance year within the retail electricity provider's service territory and the retail electricity provider advertised the low-income weatherization provider's services to its customers or members. For purposes of 30 V.S.A. § 8005(a)(3)(E), the previously created savings shall be treated as the incremental energy savings and the additional revenue paid for the savings should be used by the low-income weatherization provider, like any other grant funds it receives from the Office of Economic Opportunity, to complete low-income weatherization work in any retail electricity provider's service territory;

(2) pay $X per MWh of energy savings to a low-income weatherization provider to be used for low-income weatherization anywhere within the state, so long as the low-income weatherization provider provides low-income weatherization services within the retail electricity provider's service territory and the retail electricity provider contemporaneously advertises the low-income weatherization services to its customers or members. The rate shall be adjusted, as necessary, after an annual review; or

(3) propose alternatives to the foregoing options that satisfy the applicable requirements of 30 V.S.A. § 8005 and this rule.

4.417 Tier III Annual Planning

(a) A retail electricity provider shall file its Tier III annual plan no later than November 1 of the year immediately prior to the start of the next compliance year. The Commission shall provide a summary table template, created in collaboration with the Department and providers, to be included in the plan. A provider's annual plan shall include a completed summary table.

(b) Tier III annual plans shall include the following information:

(1) A description of the estimated Tier III compliance obligation, as determined pursuant to 30 V.S.A. § 8005(a)(3)(B), for the following compliance year and a description of the overall strategy to be implemented to meet the Tier III compliance obligation in the following compliance year, including use of any banked Tier III fossil-fuel reductions, use of any excess Tier II tradeable RECs or environmental attributes, and implementation of any energy transformation projects.

(2) When a retail electricity provider's Tier III strategy includes implementation of energy transformation projects, its Tier III annual plan shall include the following information as well as any requirements specified in section 4.412(8) of this rule:

(A) a description of the types of energy transformation projects that will be undertaken, including the types of measures to be implemented and the anticipated number of participants, with sufficient information for the Department to develop an evaluation, measurement, and verification plan and budget;

(B) as required by section 4.413 of this rule, a description of how all ratepayers will have an equitable opportunity to participate in and benefit from the energy transformation projects regardless of rate class or income level;

(C) as required by section 4.414 of this rule, a description of any energy transformation project collaborative efforts, including a methodology for allocating project costs and savings among efficiency service providers;

(D) when a retail electricity provider plans to implement an energy transformation project without coordinating with an efficiency service provider, an explanation, pursuant to 30 V.S.A. § 8005(a)(3)(E)(i) of why the delivery by the retail electricity provider is more cost-effective than delivery by another person or that there is no person other than the retail electricity provider with the expertise or capability to deliver the goods or services;

(E) as required by section 4.415 of this rule, when a retail electricity provider plans to implement energy transformation projects that are likely to increase electricity consumption, a description of the best practices to be used for demand management; strategies to be used for encouraging the installation of technologies in buildings that meet minimum energy performance standards, as applicable; and strategies to be used for customer education, outreach, and marketing; and

(F) as required by section 4.410 of this rule, a cost/benefit accounting at the energy transformation program level, including cost/benefit analyses for purposes of future-year planning when possible.

(c) Comments on a Tier III annual plan shall be submitted by the December 1 immediately following the date a plan was submitted.

(d) If the Commission has questions about a Tier III annual plan, it may schedule a workshop. If the Commission finds, after reviewing a Tier III annual plan and any comments filed about it, that the plan does not include the information required by subsection (b) of this section, the Commission shall notify the retail electricity provider, the Department, and any entities that commented on the provider's Tier III annual plan of the specific deficiency or deficiencies in the plan, and may issue an order directing the provider to file an amended plan or opening an investigation. The Commission shall aim to provide such notice by December 31.

4.418 Withdrawal and Addition of Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(ix), if a retail electricity provider concludes that an ongoing energy transformation project should be withdrawn or terminated because it no longer meets the eligibility criteria due to one or more factors beyond the control of the project and the provider, the provider shall give notice to the Commission, the Department, any customers or

other entities participating in or who applied to participate in the energy transformation project who may be affected by the withdrawal or termination, and any affected project partners. Notice shall be provided at least 30 days in advance of the withdrawal or termination.

(b) If a retail electricity provider wishes to add an energy transformation project to its current Tier III annual plan, the provider shall:

(1) notify the Commission, the Department, and any project partners at least 30 days prior to implementation,

(2) provide the information required in an annual plan, as specified in section 4.417 of this rule, and

(3) as necessary, request an estimate from the Department of any additional evaluation, measurement, and verification costs.

PART IV: COMPLIANCE FILINGS

4.419 Filing Schedule and Requirements

(a) No later than August 31 of each year, a retail electricity provider shall submit its demonstration of compliance with all Tiers of the RES, including documentation of its total retail sales, documentation of the number, type, and vintage of tradeable RECs and environmental attributes it used to obtain compliance, the fossil-fuel savings attained from energy transformation projects, and the information required by sections 4.405 and 4.411 of this rule. The Commission shall provide a compliance spreadsheet template, created in collaboration with the Department and providers, to be included in the filing. A provider's compliance filing shall include a completed compliance spreadsheet.

(b) The Department and other interested parties shall have 30 days to submit any comments on a retail electricity provider's compliance filing.

4.420 Determination of Compliance and Alternative Compliance Payment

(a) Following the submittal of a retail electricity provider's annual compliance filing, the Commission shall determine whether the provider has met its RES obligations, and in the event it has not, shall determine the appropriate alternative compliance payment.

(b) Pursuant to 30 V.S.A. § 8004(d), all required alternative compliance payments shall be paid to the Clean Energy Development Fund established under 30 V.S.A. § 8015 within 30 days of issuance of a Commission order directing payment.

4.421 Update of Annual Compliance Rates

Pursuant to 30 V.S.A. § 8005(a)(4)(B), annually on or before September 1, the Commission shall announce the applicable alternative compliance payment effective for the compliance year beginning on the following January 1.

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STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-2568-RULE

Proposed Vermont Public Utility Commission Rule 4.400	)
Renewable Energy Standard	)

DEPARTMENT OF PUBLIC SERVICE RESPONSE TO OCTOBER 2019 STAKEHOLDER COMMENTS

On October 8, 2019, the Public Utility Commission ("Commission") issued a memorandum requesting responses to comments filed by stakeholders on October 2 and 4, 2019, regarding the proposed renewable energy standard ("RES") rule, proposed Commission Rule 4.400. The Department of Public Service ("Department") responds to comments submitted regarding whether Hydro Quebec ("HQ") environmental attributes must be "bundled" with the underlying energy purchased. The Green Mountain Power Corporation ("GMP") has argued that attributes may be unbundled; the Department previously argued that attributes must be bundled. In this filing, the Department states that due to the silence and ambiguity of the statutes on this question, in conjunction with the range of policy considerations, the Department finds it is consistent with the statute and legislative intent to permit unbundling of HQ attributes.

The Department notes that the parties' filings in this matter highlight that the statutes do not directly answer whether HQ attributes must be bundled. The statutory definition in 30 V.S.A. § 8002(26) of "tradeable renewable energy credits" ("tradeable RECs") does not clearly prohibit unbundled HQ attributes, or GMP's system of verifying renewability through an attestation letter. The statute is therefore silent or ambiguous on the question of bundling HQ attributes.

The objective when interpreting a statute "is to construe and effectuate the legislative intent behind a statute."[1] In determining legislative intent, parties "look to the words of the statute itself, the legislative history and circumstances surrounding its enactment, and the legislative policy it was designed to implement."[2] If the statute's language is ambiguous, a tribunal may consider "the statute's subject matter, effects and consequences, as well as the reason for and spirit of the law."[3]

The policy goals for the renewable energy standard are articulated in 30 V.S.A. § 8001(a), which include, "[b]alancing the benefits, lifetime costs, and rates of the State's overall energy portfolio to ensure that to the greatest extent possible the economic benefits of renewable energy in the State flow to the Vermont economy in general, and to the rate-paying citizens of the State in particular."[4]

After consideration of the policy implications outlined in GMP's October 4th filing[5] as well as the other utility filings,[6] the Department concludes that unbundled HQ attributes are consistent with the statute and the policy goals of supporting renewable generation while balancing impacts on rate-payers. Furthermore, the Department upon further consideration has

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[1] *Nolan v. Fishman*, 2019 VT 63, ¶ 11, --- A.3d ---- (Vt. 2019) (internal quotation marks omitted).
[2] *Town of Lunenburg v. Supervisor & Bd. of Governors of the Unorganized Towns & Gores of Essex Cty.*, 2006 VT 71, ¶ 7, 180 Vt. 578, 580, 908 A.2d 424, 428 (2006).
[3] *Nolan*, 2019 VT 63, ¶ 11 (internal quotation marks omitted). *See also In re Koenig Sporting Goods, Inc.*, 203 F.3d 986, 988–89 (6th Cir. 2000) ("When a statute is ambiguous, we look to its purpose and may consider the statute's policy implications in determining what Congress intended.").
[4] 30 V.S.A. § 8001(a)(1).
[5] *See Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard*, Case No. 19-2568-RULE, Comments of Green Mountain Power, at 5–8 (Oct. 4, 2019).
[6] *Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard*, Case No. 19-2568-RULE, Comments of Burlington Electric Department and Vermont Public Power Supply Authority at 1-2 (Oct. 4, 2019)("BED and VPPSA do not see a reason why environmental attributes from HQ generation would not be usable to comply with the RES."); Comments of Vermont Electric Cooperative at 1–2 (Oct. 4, 2019) (supporting allowing "unbundled HQ attributes that are associated with energy imported into the region" to comply with Tier I of the RES).

concluded that the potential detriment that unbundled HQ attributes would compromise the utilities' ability to sell RECs into other New England states is less acute than the potential rate impacts.

Dated at Montpelier, Vermont, this 1st day of November, 2019.

VERMONT DEPARTMENT OF PUBLIC SERVICE

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State of Vermont
Public Utility Commission

RULE 4.400, RENEWABLE ENERGY STANDARD RULEMAKING

Responsiveness Summary

January 8, 2020

I. Introduction

Immediately after filing the draft Renewable Energy Standard ("RES") Rule with the Interagency Committee on Administrative Rules on June 28, 2019 (the first step in the formal rulemaking process), the Vermont Public Utility Commission ("Commission") issued an order requesting comment on several specific rule issues and the rule generally (the "July 2019 Order").[1]

In response to the July 2019 Order, the Commission received written comments, which are included in this rule filing, from the Vermont Department of Public Service ("Department"), Green Mountain Power Corporation ("GMP"), Vermont Electric Cooperative ("VEC"), Burlington Electric Department ("BED") and the Vermont Public Power Supply Authority ("VPPSA")[2], and the Vermont Office of Economic Opportunity ("OEO").

The Commission also provided an opportunity for participants to respond to the initial comments. The Commission received responses from the Department and GMP.

Brief synopses of the comments and responses are provided below. Like comments are summarized together and responded to jointly. The original comment letters are included with this responsiveness summary as part of the complete rulemaking package.

II. Comments and Responses

A. Hydro Quebec and Environmental Attributes

In the July 2019 Order, the Commission requested comment on whether, for purposes of complying with Tier I of the RES, environmental attributes associated with renewable energy generated by Hydro Quebec must be purchased in a "bundle" with an energy purchase or whether the attributes could be purchased on their own, separate from an energy purchase.

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[1] *Proposed Vermont Public Utility Commission Rule 4.400 Renewable Energy Standard*, Case No. 19-2568-RULE, Order of 7/3/2019.

[2] BED and VPPSA filed a joint comment letter.

Comments:

GMP, VEC, and BED & VPPSA argued that Hydro Quebec attributes associated with energy delivered into New England may be purchased separately from an energy purchase. GMP also proposed some clarifying changes to section 4.404.

The Department initially argued that Hydro Quebec environmental attributes must be purchased with an energy purchase. However, after reviewing the filings made by the other participants and upon more careful review of the statute and further consideration of the policy implications, the Department reconsidered its initial position. The Department concluded that state statute does not prohibit the use of unbundled Hydro Quebec environmental attributes and that allowing the use of unbundled Hydro Quebec environmental attributes is consistent with the goals of the RES to support renewable generation while balancing impacts to ratepayers.

Response:

The Commission concurs with the commenters that a utility may purchase Hydro Quebec environmental attributes separately from an energy purchase to help satisfy the utility's required amounts of renewable energy under the RES. The statutes governing this issue include 30 V.S.A. §§ 8001, 8002, 8004, 8005, and 8006.

Sections 8004 and 8005 establish the RES and the total renewable energy requirement and the parameters for a utility to demonstrate compliance with those requirements. The total renewable energy requirement requires that 55% of a utility's retail electric sales be renewable starting in 2017. The requirement gradually increases over time until reaching 75% of a utility's retail electric sales in 2032. To demonstrate compliance with the total renewable energy requirement a utility must own:

> sufficient energy produced by renewable energy plants or sufficient *tradeable renewable energy credits* from plants whose energy is capable of delivery in New England that reflect the required amounts of renewable energy set forth in section 8005 of this title … A retail electricity provider may meet the required amounts of renewable energy through eligible *tradeable renewable energy credits* that it owns and retires, eligible renewable energy resources with environmental attributes still attached, or a combination of those credits and resources.

30 V.S.A. § 8004(a) (emphasis added). Section 8005(a)(1)(A) restates Section 8004(a) in slightly different words:

> To satisfy this requirement [the total renewable energy requirement], a provider may use renewable energy with environmental attributes attached or any class of *tradeable renewable energy credits* generated by any renewable energy plant whose energy is capable of delivery in New England.

(emphasis added).

The language of Sections 8004 and 8005 allows for a utility to satisfy the total renewable energy requirement with "tradeable renewable energy credits" from renewable energy that can be

delivered to New England, and Hydro Quebec environmental attributes can meet those requirements. "Tradeable renewable energy credits" are defined as:

> all of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:
>
> (A) those attributes are transferred or recorded separately from that unit of energy;
>
> (B) the party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and
>
> (C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in any state and approved by the Commission.

30 V.S.A. § 8002(26). Hydro Quebec environmental attributes satisfy that definition.

First, Hydro Quebec environmental attributes can be transferred and recorded separately from their associated energy. Hydro Quebec delivers energy from its system into the New England grid. That delivered energy is tracked and monitored in the New England Power Pool Generation Information System ("NEPOOL GIS"), which creates Hydro Quebec system import certificates for those quantities of energy. For a utility that purchases the environmental attributes associated with that energy, Hydro Quebec provides an attestation: identifying the specific generation mix from which the delivered energy was supplied; stating that Hydro Quebec has not used the environmental attributes in some other way (e.g., has not sold or transferred them to another entity, has not used the attributes to meet another regulatory obligation, etc.); and stating that Hydro Quebec is transferring its full interests in those attributes.

Second, the utility claiming ownership of the Hydro Quebec environmental attributes can demonstrate, through the Hydro Quebec attestation and the associated information in NEPOOL GIS, that it has acquired the exclusive legal ownership of all the environmental attributes associated with specific energy generated by the Hydro Quebec system and delivered into the New England grid.

Third, exclusive legal ownership of the environmental attributes can be verified through a system authorized by the Commission.[3] The Commission's June 2016 Order[4] and this rule establish requirements through which a utility's exclusive legal ownership of Hydro Quebec environmental attributes can be verified. A utility must demonstrate that the environmental attributes are eligible for the RES, that the utility owns them, and that they have not been claimed anywhere else. Additionally, and importantly, the utility must retire the environmental

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[3] See 30 V.S.A. § 8006, which directs the Commission to "establish or adopt a system of tradeable renewable energy credits for renewable resources that may be earned by electric generation qualifying for the RES."

[4] *Investigation re: establishment of the Renewable Energy Standard program*, Docket No. 8550, Order of 6/28/2016 at 64.

attributes in NEPOOL GIS, which ensures that the environmental attributes are not double-counted by another entity in New England.

Consistent with the foregoing analysis, the Commission has made the following clarifying changes to the rule:

- In section 4.404(b):

(b) Retail Electricity Providers shall demonstrate their compliance with their Tier I and II obligations, as established under 30 V.S.A. §§ 8005(a)(1)(B) and (a)(2)(C), through ownership and retirement of Tradeable RECs in NEPOOL GIS. If a Provider uses Tradeable RECs or Environmental Attributes that cannot be ~~monitored and traded~~ certified as Tier I or Tier II Tradeable RECs in NEPOOL GIS, that are from a control area that lacks a GIS system integrated with NEPOOL GIS, or for which the renewable content is not accurately represented on its NEPOOL GIS certificates, the Provider shall demonstrate compliance as provided below.

- In section 4.404(b)(1):

(1) ~~A Retail Electricity Provider may demonstrate its compliance with the RES by means of Environmental Attributes that cannot be monitored in NEPOOL GIS. A Provider using~~ For Tradeable RECs and Environmental Attributes that cannot be ~~monitored and traded~~ certified as Tier I or Tier II Tradeable RECs in NEPOOL GIS, that are from a control area that lacks a GIS system integrated with NEPOOL GIS, or for which the renewable content is not accurately represented on its NEPOOL GIS certificates, a Provider shall submit with its annual RES compliance filing documentation demonstrating that:

(A) it owns the Attributes in question,

(B) the Attributes are eligible for the RES, and

(C) the Attributes have not been claimed in any other jurisdiction.

- In section 4.404(b)(2):

(2) ~~In the case of energy procured from Hydro-Quebec, so long as Environmental Attributes from Hydro-Quebec are not monitored and traded in NEPOOL GIS, a Retail Electricity Provider shall submit with its annual RES compliance filing the information required by subdivision (1) of this subsection and documentation demonstrating its ownership of the Environmental Attributes associated with that energy through ownership and retirement of those Attributes as they are tracked in NEPOOL GIS~~ For Tradeable RECs and Environmental Attributes for which the renewable content is not accurately represented on the associated NEPOOL GIS certificates, a Retail Electricity Provider shall provide the fraction of renewable content. The value of the Tradeable RECs and Attributes shall be determined by multiplying the MWhs ~~purchased from Hydro-Quebec~~ as tracked in NEPOOL GIS by the percentage of Renewable Energy contained in the ~~Hydro-Quebec~~ attestation form supplied by the Provider. The Provider shall also retire all Tradeable RECs and Environmental Attributes subject to this subdivision and used for compliance.

B. Administrative Costs

In the July 2019 Order, the Commission asked for comment on whether to define "administrative costs" in the rule, and if so, what the definition should be.

Comments:

The Department commented that the rule should state that a common definition for "administrative costs" will be developed by the utilities and suggested that the common definition, once developed, could be included in the RES Compliance Spreadsheet. The Department commented that the rule should clarify how administrative costs should be applied for purposes of Tier III compliance. Additionally, the Department commented that certain Tier III administrative costs should be reported in compliance filings.

GMP, VEC, and BED & VPPSA all supported the Department's proposal.

Response:

The Commission has incorporated the Department's recommendation by making the following changes to the rule:

- In section 4.410, adding:

(7) For purposes of completing cost-effectiveness screenings of Energy Transformation Projects and evaluating the costs of Energy Transformation Projects relative to the Alternative Compliance Payment, the following costs shall not be included:

(A) Planning and development costs that a Retail Electricity Provider incurs before beginning to implement an Energy Transformation Project, and

(B) The regulatory costs of participating in Commission proceedings and meetings with the Department regarding Energy Transformation Projects.

- In section 4.417(b), adding:

(G) projected planning and development costs that will be incurred before the Provider fully implements an Energy Transformation Project, and projected administrative costs.

- In section 4.419(a), adding:

The compliance spreadsheet template may define Tier III administrative costs, as necessary.

- In section 4.419(b), adding after "A Provider's compliance filing shall include a completed compliance spreadsheet:

… and a report of the following Tier III administrative costs; regulatory costs, including costs to participate in Commission proceedings and Department meetings; and planning and development costs.

C. Tier III Annual Plans and Load Growth

In the July 2019 Order, the Commission sought comment on what information should be included in Tier III annual plans regarding load growth to ensure that load growth does not result in unnecessary transmission and distribution upgrades.

Comments:

The Department commented that a utility should have to include a detailed load forecast in its triennial Integrated Resource Plan ("IRP"); that the Tier III annual plan should reference the IRP forecast and include any relevant updates or major deviations from the assumptions used in the IRP forecast; and that the Tier III annual plan should include a discussion of the measures available to control load, the measures the utility is implementing, the reasons for implementing or not implementing the available measures, and the measures' costs and effectiveness.

GMP supported the Department's proposal and recommended that the load forecast look no more than 10 years into the future.

VEC commented that utilities should include detailed discussions of load growth in their IRPs and that Tier III annual plans should include information about expected load growth and strategies for managing that load.

BED & VPPSA commented that Tier III annual plans should reference the IRP and highlight any significant deviations from what was included in the IRP.

Response:

The Commission has incorporated the Department's recommendation by making the following changes to the rule:

- In section 4.415:

(6) For a Retail Electricity Provider implementing Energy Transformation Projects that increase the use of electric energy, the Provider's Tier III annual plan shall include: ~~options for best practices for demand management~~

(A) reference to the load forecast developed in the Provider's most recently Commission-approved Integrated Resource Plan and any relevant updates to or major deviations from the assumptions used in that load forecast;

(B) a discussion of the available options for controlling load and their effectiveness and costs, the options the Provider is implementing and why, and whether the projected volume of Energy Transformation Projects warrants demand management activities;

(C) strategies for encouraging the installation of technologies in buildings that meet minimum energy performance standards, as applicable; and

(D) strategies for Customer education, outreach, and marketing.

- In section 4.417(b)(2):

(E) as required by section 4.415 of this rule, when a Retail Electricity Provider plans to implement Energy Transformation Projects that are likely to increase electricity consumption, ~~a description of the best management practices to be used for demand management~~ reference to the load forecast developed in the Provider's most recent Integrated Resource Plan and any relevant updates to or major deviations from the assumptions used in that load forecast; a discussion of the available options for controlling load and their effectiveness and costs, the options the Provider is implementing and why, and whether the projected volume of Energy Transformation Projects warrants demand management activities; strategies to be used for encouraging the installation of technologies in buildings that meet minimum energy performance standards, as applicable; and strategies to be used for Customer education, outreach, and marketing; ~~and~~

D. Tier III Cost-Effectiveness Screening and Evaluation of Alternative Energy Transformation Projects

In the July 2019 Order, the Commission requested comment on what, if any, additional provisions should be included in the rule regarding the cost-effectiveness screening portion of the RES requirements and the requirement that utilities evaluate alternative energy transformation projects that do not increase electric consumption.

Comments:

The Department recommended that a utility should provide an analysis of alternatives that do not increase electricity consumption as a part of its IRP and that its Tier III annual plan should reference the IRP and note any major changes. Because utilities complete IRPs every three years, the Department recommended that if a utility does not have to complete its IRP before its next Tier III annual plan, the annual plan should contain the consideration of alternatives.

GMP supported the Department's proposal and stated that it wishes to continue to work with the Department and other utilities to ensure the cost-effectiveness screening against the alternative compliance payment is done at the appropriate level so that innovative projects are not prematurely or inappropriately screened from use for Tier III compliance.

VEC commented that it is happy to include in its Tier III annual plan a summary of possible alternatives to particular technologies.

BED & VPPSA commented that utilities should explain their overall Tier III strategy in their Tier III annual plans, which may include examining the cost-effectiveness of electrification projects, electric sales, other Tier III eligible projects, and the use of Tier II renewable energy credits to satisfy Tier III obligations.

Response:

The Commission has incorporated the Department's recommendation by making the following changes to the rule in section 4.410:

(3) The Energy Transformation Project shall meet the need for its goods or services at the lowest present-value life-cycle cost, including environmental and economic costs. This

evaluation shall include an analysis of alternatives that do not increase electric consumption. If a Retail Electricity Provider's Integrated Resource Plan includes an analysis of alternatives, the Provider's Tier III annual plan shall reference the analysis in the Integrated Resource Plan and shall include any significant changes. If a Provider's Integrated Resource Plan does not include an analysis of alternatives, the Provider's Tier III annual plan shall include the analysis.

E. Customer Personal Identifying Information

In the July 2019 Order, the Commission requested comment on what customer personal identifying information in the RES compliance filings should be protected from public disclosure, and how the Commission should ensure that information is protected.

Comments:

The Department did not comment on this. However, in the Department's RES Tier III Verification Report for 2018 the Department stated:

> Currently, circumstances limit the information that a DU can provide to the PSD for its review of complex custom measures. Once information is received by the PSD it becomes a matter of public record. The information required to do a thorough review of measures can include customer and business specific information that should be protected - records such as names, addresses, electrical consumption, fuel use, account numbers, maintenance records, etc. PSD staff is thus required to travel and spend significant amounts of time at a DUs office to review records onsite. If this information provided to the PSD was protected by PUC Order, it would allow for a more thoughtful review of a proposed project as well as providing ready access to a project's information if changes or updates to savings need to be calculated and confirmed.[5]

GMP commented that it has not included customer personal identifying information in RES compliance filings and does not intend to do so.

VEC commented that all personal identifying information should be protected, including customers' names, account numbers, and addresses.

BED & VPPSA commented that personal identifying information should not be filed in RES compliance filings but that the Department should have access to specific customer information for purposes of conducting savings verification.

Response:

Utilities should remove customers' personal identifying information from all RES compliance filings, including those related to custom energy transformation projects, to the extent practicable. If there is customer personal identifying information that would qualify for exemption from disclosure under 1 V.S.A. § 317 that cannot be removed but is necessary for the Department to review to verify savings, the Department and the utility may enter into a

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[5] *RES Tier III Verification Report – Revised*, Case No. 19-0716-INV, filed on 7/17/2019 at 34 .

protective agreement to be approved by the Commission. By entering a protective agreement, the Department may be able to avoid the time and expense related to traveling to utilities' offices.

F. BED & VPPSA Additional Comments

BED & VPPSA also provided comments on the rule generally. Several of BED & VPPSA's comments suggested non-substantive formatting, style, or minor clarifying changes. The Commission has incorporated those changes into the rule. The remainder of BED & VPPSA's comments are summarized and responded to below.

1. Comment: BED & VPPSA commented on ways to improve or clarify several definitions in the rule.

Response: The definitions that BED & VPPSA commented on are statutory definitions that come from 30 V.S.A. § 8002. Because these definitions are established in statute, the Commission has not proposed making changes to the definitions through this rulemaking.

2. Comment: Does section 4.404(b)(2) effectively apply to the NYPA-Niagara resource as well as Hydro-Quebec?

Response: Section 4.404(b) is now written to apply generally to tradeable RECs and environmental attributes: (1) that are not monitored and traded in NEPOOL GIS, (2) that are from a control area that lacks a GIS system integrated with NEPOOL GIS, or (3) for which the renewable content is not accurately represented on the associated NEPOOL GIS certificates. Therefore, if the NYPA-Niagara resource has not yet taken the necessary steps so that its tradeable RECs can be tracked, monitored, traded, and retired in NEPOOL GIS, then, yes, Section 4.404(b) will apply to the NYPA-Niagara resource.

3. Comment: The use of the term "environmental attributes" versus "attributes" is not consistent.

Response: The terms "environmental attributes" and "attributes" are interchangeable. See the definitions section of the rule.

4. **Comment:** The language in section 4.405(c) seems to imply the ability to bank "environmental attributes" that are not associated with "tradeable RECs." Is this intentional?

Response: The RES statute allows utilities to meet their Tier I RES obligations with "renewable energy with environmental attributes attached" or with "any class of tradeable renewable energy credits generated by any renewable energy plant whose energy is capable of delivery in New England."[6] Therefore, it is appropriate to reference both environmental attributes and tradeable renewable energy credits in section 4.405.

5. Comment: Should all Tier II resources be defined as qualifying for Tier I by default since Tier II is a subset of Tier I?

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[6] 30 V.S.A. § 8005(a)(1)(A).

Response: All Tier II resources also qualify as Tier I resources. The Commission has added a sentence to section 4.406(a), which states, "A plant that qualifies as a Tier II resource automatically qualifies as a Tier I resource."

6. Comment: In section 4.406(a) – "facility" is not a defined term. Should the term "plant" be used instead?

Response: It is appropriate to use the term "facility" in section 4.406, rather than the term "plant." Section 4.406 provides the process by which a facility may seek to be qualified as Tier I or Tier II eligible. At the most basic level, to be qualified for the RES, a facility must generate electricity from renewable energy. The term "plant" means a facility that generates electricity from renewable energy. However, the rule allows the Commission to assess new types of facilities to determine whether they satisfy the definition of "renewable energy." Therefore, a facility may seek to qualify as Tier I or II, but the Commission may determine that it is not renewable and therefore would not be a "plant."

7. Comment: In section 4.406(b)(1)(A), the list of fuel sources is not necessary. To the extent it is needed, it should be added to the definition of "renewable energy." Also, is biomass combustion intentionally omitted from this list and the list in section 4.406(b)(1)(B)(iv)?

Response: Section 4.406 establishes two processes for facilities to qualify for Tiers I and II of the RES – a registration process and an application process. The fuel sources listed in sections 4.406(b)(1)(A) and 4.406(b)(1)(B)(iv) may qualify through the registration process, whereas any fuel sources not listed under those sections must seek to be qualified through the application process. A plant that uses biomass as its fuel source must use the application process; this is intentional.[7]

8. Comment: What types of resources is section 4.406(c) (the application section) intended to cover?

Response: See response immediately above. Section 4.406(c) is intended to cover plants that use biomass as their fuel source and any other renewable energy plants not listed under section 4.406(b) (the registration section).

9. Comment: In section 4.406(d)(2)(A)(iv) should "capacity" read "plant capacity"?

Response: Because section 4.406(d) is about aggregated systems (meaning a group of systems) rather than single plants, and "plant capacity," as defined in 30 V.S.A. § 8002, refers to a single plant, it is appropriate to leave "capacity" as it is, rather than change it to "plant capacity."

10. Comment: Section 4.409(d)(2) specifies that the Technical Advisory Group ("TAG") file the list of measures that it reviewed in the previous year by January 31. To facilitate utility Tier III planning, the TAG should be required to submit this filing in advance of the utilities'

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[7] *See Investigation re: establishment of the Renewable Energy Standard Program*, Docket No. 8550, Order of 6/28/2016 at 16-18.

Tier III annual plan submission on November 1. The deadline for TAG measure characterization should be October 1. It is BED & VPPSA's understanding that the TAG currently completes its measure characterization work between May and October, so having measure characterization due by October 1 should not require major modifications to the existing schedule.

Response: The Commission has made the requested date change to section 4.409(d)(2) to help facilitate utility Tier III planning.

11. Comment: Utilities should be permitted but not obligated to satisfy Tier III requirements with the low-income weatherization energy transformation projects included under section 4.416.

Response: Utilities are not required to satisfy their Tier III requirements with the low-income weatherization energy transformation projects included under section 4.416.

12. Comment: BED & VPPSA caution against including a specific $/MWh value in section 4.416 of the rule itself; the per-MWh cost should be calculated through a transparent process conducted by the TAG.

Response: The Commission has incorporated the process proposed by the Vermont Office of Economic Opportunity. See response H. of this Responsiveness Summary.

G. GMP Additional Comments

1. Comment: In section 4.405(c)(1), GMP recommended switching the order of "placed into a reserve account" and "retired." This suggestion is intended to indicate a higher relative priority of retiring attributes as opposed to reserving them.

Response: The Commission has made the requested change but notes that the order in which these phrases occur does not convey a relative order of importance.

2. Comment: In section 4.406(a), GMP recommended clarifying changes to indicate that section 4.406 applies both to individual facilities seeking to be qualified for Tier I or II of the RES as well as to groups of facilities seeking to be qualified as aggregated facilities under Tier I or II of the RES.

Response: The Commission has made the following clarifying changes to section 4.406(a), consistent with GMP's recommendation:

(a) A facility or group of facilities seeking to be qualified for Tier I or II of the RES shall ~~submit~~ have a qualification registration or application submitted to the Commission pursuant to the requirements of this section. A facility that qualifies as a Tier II resource automatically qualifies as a Tier I resource. Facilities that qualify as a Tier I or II resource shall receive a statement of qualification from the Commission, and the Commission shall notify the NEPOOL GIS administrator of newly qualified facilities on a monthly basis.

3. Comment: In section 4.406(d), GMP commented that it does not believe it is appropriate to limit the aggregation of renewable resources to net-metered facilities. GMP stated

that it is appropriate for a Vermont retail supplier to be able to aggregate other types of facilities, such as small utility-owned renewable plants.

Response: The Commission agrees that there are groups of resources other than net-metering resources that may be appropriate for a utility to aggregate. Therefore, the Commission has removed the phrase "net-metered" from section 4.406(d).

H. Vermont Office of Economic Opportunity ("OEO") Comments

OEO provided comments on section 4.416(2) of the rule only.

Comment: OEO suggested clarifying edits to the language of that subsection and a process by which to annually establish the rate per MWh of low-income weatherization energy savings to be paid under that subsection.

GMP commented that it is not supportive of OEO's proposal because the rate per MWh of low-income energy savings could be at or close to the alternative compliance payment, which represents a regulatory threshold for program costs, not how much a utility should spend per MWh. GMP also commented that OEO's proposal would substantially raise the cost of Tier III compliance for GMP.

Response: Section 4.416(2) establishes one type of energy transformation project that a utility *may* pursue. It does not mandate that utilities contribute anything towards low-income weatherization, rather it establishes a rate that utilities may pay to a low-income weatherization provider in exchange for one MWh of lifetime energy savings to be used toward Tier III compliance. While true that this energy transformation project option may be more costly than other options, each utility must evaluate, on a case-by-case basis and considering a variety of factors, which energy transformation projects to invest in.

The amendments proposed by OEO clarify how the rate per MWh of low-income weatherization energy savings will be set and adjusted annually. Therefore, the Commission has incorporated the changes proposed by OEO by making the following changes to section 4.416(2):

(2) pay ~~$X~~ a rate per MWh of lifetime energy savings to a low-income weatherization provider ~~to~~ that shall be used ~~for~~ by the low-income weatherization provider to fund low-income weatherization projects anywhere within the state, so long as the low-income weatherization provider provides low-income weatherization services within the Retail Electricity Provider's service territory and the Retail Electricity Provider contemporaneously advertises the low-income weatherization services to its Customers or members. ~~The rate shall be adjusted, as necessary, after an annual review; or~~ The MWh Rate shall be updated annually, and the lesser of the calculated rate or the Alternative Compliance Payment shall be established as the rate per MWh of lifetime energy savings to be used for the calendar year. By October 1 of each year, the Vermont Office of Economic Opportunity shall file the updated MWh Rate with the Commission. The following definitions and calculations shall apply to this subsection.

(A) "Heat Rate" is the official conversion factor to translate from a representation of savings in Mmbtu to MWh.

(B) "Project Lifetime" shall be determined for each weatherization project using an energy modeling software program approved for use by the Vermont Office of Economic Opportunity and the United States Department of Energy.

(C) "Mmbtu Lifetime Savings Projections" shall be determined for each weatherization project using an energy modeling software program approved for use by the Vermont Office of Economic Opportunity and the United States Department of Energy.

(D) "MWh Lifetime Savings Projections" shall be determined by multiplying the projected Mmbtu Lifetime Savings Projections from a weatherization project by the Heat Rate.

(E) The MWh Rate shall be updated annually by the Vermont Office of Economic Opportunity. The MWh Rate to be used for each calendar year shall be determined by:

(i) summing the MWh Lifetime Savings Projections achieved by the Home Weatherization Assistance Program during the most recently completed program year,

(ii) summing the material and onsite labor costs incurred during the most recently completed program year as they are represented in the Vermont Office of Economic Opportunity and United States Department of Energy approved energy modeling software,

(iii) dividing the material and onsite labor costs by the MWh Lifetime Savings Projections, and

(iv) rounding to the nearest whole dollar increment.

Clean Text

4.400 RENEWABLE ENERGY STANDARD RULE

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PART I: GENERAL PROVISIONS

4.401 Purpose and Background

(a) The purpose of this rule is to implement the Renewable Energy Standard ("RES"), established under 30 V.S.A. chapter 89, which requires Vermont Retail Electricity Providers to acquire specified amounts of Renewable Energy in the form of Tradeable Renewable Energy Credits ("Tradeable RECs") or Environmental Attributes and to achieve fossil-fuel reductions by implementing Energy Transformation Projects.

(b) The RES is divided into three categories, known as Tiers.

(1) Tier I requires Retail Electricity Providers to procure an amount of Renewable Energy equivalent to 55% of their annual retail electric sales for the year 2017, increasing by 4% every third January 1 thereafter, eventually reaching 75% in 2032.

(2) Tier II requires that a portion of the Renewable Energy that Retail Electricity Providers procure to satisfy Tier I be from New Renewable Energy from Distributed Renewable Generation resources. Under Tier II, Retail Electricity Providers must procure an amount of New Renewable Energy equivalent to 1% of their annual retail electric sales from Distributed Renewable Generation resources in 2017, increasing by three-fifths of a percent each year thereafter, eventually reaching 10% in 2032. For a Retail Electricity Provider meeting the 100% renewable requirements of 30 V.S.A. § 8005(b), the provider may satisfy the Tier II requirements by accepting net-metering systems within its service territory pursuant to the provisions of Title 30 of the Vermont Statutes Annotated that govern net-metering.

(3) Tier III requires Retail Electricity Providers to procure additional Distributed Renewable Generation eligible for Tier II or to achieve fossil-fuel reductions from Energy Transformation Projects equivalent to 2% of their annual retail electric sales in 2017, increasing by two-thirds of a percent each year thereafter, eventually reaching 12% in 2032. However, in the case of a Retail Electricity Provider that is a municipal electric utility serving not more than 6,000 Customers, the required amount for Tier III is 2% of the provider's annual retail sales beginning on January 1, 2019, increasing by an additional two-thirds of a percent each subsequent January 1 until reaching 10 and two-thirds percent on and after January 1, 2032.

(A) Any Retail Electricity Provider may petition the Commission: (i) to reduce its Tier III requirement in any given year, or (ii) if the provider fails to achieve its Tier III requirement in a given year, to allow the provider to avoid paying the Alternative Compliance Payment. The Commission shall apply the standards provided in 30 V.S.A. § 8005(a)(3)(G).

(B) For a Retail Electricity Provider that meets the 100% renewable requirements of 30 V.S.A. § 8005(b) and has been appointed as an energy efficiency entity under 30 V.S.A. § 209(d), the provider may petition the Commission to reduce its Tier III requirement as provided in 30 V.S.A. § 8005(b).

4.402 Authority

This rule is adopted pursuant to 30 V.S.A. §§ 8001(b), 8004(b), and 8005(a)(3)(F).

4.403 Definitions

For purposes of this rule, the following definitions shall apply:

"Alternative Compliance Payment" means a payment made to the Vermont Clean Energy Development Fund established under 30 V.S.A. § 8015, in lieu of purchasing Renewable Energy, Tradeable RECs or Environmental Attributes, or supporting Energy Transformation Projects to satisfy the requirements of 30 V.S.A §§ 8004 and 8005 and this rule. The rates for Alternative Compliance Payments are established pursuant to 30 V.S.A. § 8005(a)(4) and section 4.421 of this rule.

"Commission" means the Vermont Public Utility Commission or the Commission's duly authorized representative.

"Customer" means a retail electric customer.

"Department" means the Vermont Department of Public Service.

"Distributed Renewable Generation" means one of the following:

(A) a Renewable Energy Plant that is New Renewable Energy; has a Plant Capacity of 5 MW or less; and

(i) is directly connected to the subtransmission or distribution system of a Vermont Retail Electricity Provider; or

(ii) is directly connected to the transmission system of an electric company required to submit a Transmission System Plan under 30 V.S.A. § 218c(d), if the Plant is part of a plan approved by the Commission to avoid or defer a transmission system improvement needed to address a transmission system reliability deficiency identified and analyzed in that Plan; or

(B) a net-metering system approved under the former 30 V.S.A. § 219a or under 30 V.S.A. § 8010 if the system is New Renewable Energy and the interconnecting Retail Electricity Provider owns and retires the system's Environmental Attributes.

"Efficiency Service Providers" means entities providing energy efficiency services and programming, including the Energy Efficiency Utilities, weatherization agencies, and affordable housing agencies.

"Energy Conversion Efficiency" means the effective use of energy and heat from a combustion process.

"Energy Efficiency Utility" means an entity appointed by the Commission pursuant to 30 V.S.A. § 209(d)(2) to provide energy efficiency programs and measures.

"Energy Transformation Measure" means a piece of equipment or system; a strategy intended to affect consumer energy use behaviors; or a modification of equipment, systems, or operations that reduces the amount of fossil fuel that would otherwise have been used. Examples include an individual cold-climate heat pump, heat pump water heater, or electric vehicle.

Energy Transformation Measures may be prescriptive measures approved in accordance with the processes established by section 4.409 of this rule or custom measures not previously approved under section 4.409.

"Energy Transformation Program" means all Energy Transformation Projects administered by a Retail Electricity Provider.

"Energy Transformation Project" means an undertaking that commenced on or after January 1, 2015, that provides energy-related goods or services but does not include or consist of the generation of electricity and that results in a net reduction in fossil fuel consumption by the Customers of a Retail Electricity Provider and in the emission of greenhouse gases attributable to that consumption. Examples of Energy Transformation Projects may include home weatherization or other thermal energy efficiency measures; air source or geothermal heat pumps; high efficiency heating systems; increased use of biofuels; biomass heating systems; support for transportation demand management strategies; support for electric vehicles or related infrastructure; and infrastructure for the storage of Renewable Energy on the electric grid. Energy Transformation Projects may consist of: (1) one or more prescriptive Energy Transformation Measures approved in accordance with the processes established by section 4.409 of this rule, (2) one or more custom Energy Transformation Measures not previously approved under section 4.409, or (3) a combination of Energy Transformation Measures from (1) and (2).

"Environmental Attributes" or "Attributes" means the characteristics of a Plant that enable the energy it produces to qualify as Renewable Energy and include any and all benefits of the Plant to the environment such as avoided emissions or other impacts to air, water, or soil that may occur through the Plant's displacement of a nonrenewable energy source.

"Existing Renewable Energy" means Renewable Energy produced by a Plant that came into service prior to or on June 30, 2015.

"kW" means kilowatt or kilowatts (AC).

"kWh" means kW-hour or hours.

"Mmbtu" means one million British thermal units.

"MW" means megawatt or megawatts (AC).

"MWh" means MW-hour or hours.

"NEPOOL GIS" means the Generation Information System, or its successor, operated by the New England Power Pool that is used to track and monitor Tradeable RECs.

"New Renewable Energy" means Renewable Energy produced by a specific and identifiable Plant coming into service after June 30, 2015.

(A) Energy from within a system of generating plants that includes Renewable Energy shall not constitute New Renewable Energy, regardless of whether the system includes specific Plants that came or come into service after June 30, 2015.

(B) "New Renewable Energy" also may include the additional energy from an Existing Renewable Energy Plant retrofitted with advanced technologies or otherwise operated, modified, or expanded to increase the kWh output of the Plant in excess of an historical baseline established by calculating the average output of that Plant for the 10-year period that ended June 30, 2015. If the production of New Renewable Energy through changes in operations, modification, or expansion involves combustion of the resource, the system also must result in an incrementally higher level of Energy Conversion Efficiency or significantly reduced emissions.

"Plant" shall have the same meaning as in 30 V.S.A. § 8002.

"Plant Capacity" means the rated electrical nameplate for a Plant, except that, in the case of a solar energy Plant, the term shall mean the aggregate AC nameplate capacity of all inverters used to convert the Plant's output to AC power.

"Renewable Energy" means energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate.

(A) For purposes of this definition, methane gas and other flammable gases produced by the decay of sewage treatment plant wastes or landfill wastes and anaerobic digestion of agricultural products, byproducts, or wastes, or of food wastes shall be considered Renewable Energy resources, but no other form of solid waste, other than silvicultural waste, shall be considered renewable.

(B) For purposes of this definition, no form of nuclear fuel shall be considered renewable.

(C) The only portion of electricity produced by a system of generating resources that shall be considered renewable is that portion generated by a technology that qualifies as renewable under this definition.

(D) The Commission by rule may add technologies or technology categories to the definition of "Renewable Energy," provided that technologies using the following fuels shall not be considered Renewable Energy supplies: coal, oil, propane, and natural gas.

(E) In this rule, Renewable Energy refers to either "Existing Renewable Energy" or "New Renewable Energy."

"RES" means the Renewable Energy Standard established under 30 V.S.A. §§ 8004 and 8005.

"Retail Electricity Provider" or "Provider" means a company engaged in the distribution or sale of electricity directly to the public.

"Technical Advisory Group" is a committee, originally established in relation to the Energy Efficiency Utilities, which includes the Department, Energy Efficiency Utilities, and Retail Electricity Providers, that reviews and approves the methodology and associated assumptions underlying measure-savings calculations included in the Technical Reference Manual and provides approval of Energy Transformation Measures.

"Technical Reference Manual" is a reference manual, established and maintained by the Energy Efficiency Utilities in consultation with the Technical Advisory Group, that provides methods, formulas, and default assumptions for estimating energy and peak impacts, including fossil-fuel savings, from measures and projects promoted by the Energy Efficiency Utilities' energy efficiency programs and used by Retail Electricity Providers for compliance with Tier III.

"Tier I" means the Renewable Energy Requirements for Retail Electricity Providers established under 30 V.S.A. § 8005(a)(1).

"Tier II" means the Distributed Renewable Generation requirements for Retail Electricity Providers established under 30 V.S.A. § 8005(a)(2).

"Tier III" means the energy transformation requirements for Retail Electricity Providers established under 30 V.S.A. § 8005(a)(3).

"Tradeable REC" or "Tradeable Renewable Energy Credit" means all the Environmental Attributes associated with a single unit of energy generated by a Renewable Energy source where:

(A) those Attributes are transferred or recorded separately from that unit of energy;

(B) the party claiming ownership of the Tradeable Renewable Energy Credits has acquired the exclusive legal ownership of all, and not less than all, the Environmental Attributes associated with that unit of energy; and

(C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the Commission or any program for tracking and verification of the ownership of Environmental Attributes of energy legally recognized in any state and approved by the Commission.

PART II: TIERS I & II

4.404 System for Tracking Compliance with Tiers I and II

(a) Pursuant to 30 V.S.A. § 8006(a), the principal mechanism for the tracking and monitoring of Tradeable RECs qualifying for the RES shall be the New England Power Pool's Generation Information System, known as "NEPOOL GIS," or its successor.

(b) Retail Electricity Providers shall demonstrate their compliance with their Tier I and II obligations, as established under 30 V.S.A. §§ 8005(a)(1)(B) and (a)(2)(C), through ownership and retirement of Tradeable RECs in NEPOOL GIS. If a Provider uses Tradeable RECs or Environmental Attributes that cannot be certified as Tier I or Tier II Tradeable RECs in NEPOOL GIS, that are from a control area that lacks a GIS system integrated with NEPOOL GIS, or for which the renewable content is not accurately represented on its NEPOOL GIS certificates, the Provider shall demonstrate compliance as provided below.

(1) For Tradeable RECs and Environmental Attributes that cannot be certified as Tier I or Tier II Tradeable RECs in NEPOOL GIS, that are from a control area that lacks a GIS system integrated with NEPOOL GIS, or for which the renewable content is not accurately represented

on the associated NEPOOL GIS certificates, a Provider shall submit with its annual RES compliance filing documentation demonstrating that:

(A) it owns the Attributes in question,

(B) the Attributes are eligible for the RES, and

(C) the Attributes have not been claimed in any other jurisdiction.

(2) For Tradeable RECs and Environmental Attributes for which the renewable content is not accurately represented on the associated NEPOOL GIS certificates, a Retail Electricity Provider shall provide the fraction of renewable content. The value of the Tradeable RECs and Attributes shall be determined by multiplying the MWhs as tracked in NEPOOL GIS by the percentage of Renewable Energy contained in the attestation form supplied by the Provider. The Provider shall also retire all Tradeable RECs and Environmental Attributes subject to this subdivision and used for compliance.

4.405 Banking of Tradeable RECs and Environmental Attributes

(a) Pursuant to 30 V.S.A. § 8004(c), if a Retail Electricity Provider has satisfied its Tier I and II obligations for a given year and has excess Tradeable RECs or Environmental Attributes eligible for the RES, the Provider may bank the excess Tradeable RECs or Attributes to use for compliance with the RES in one of the three years following the year in which the Tradeable RECs or Attributes were created.

(b) A Retail Electricity Provider seeking to bank Tradeable RECs or Environmental Attributes in excess of its Tier I and II obligations shall either retire the Tradeable RECs or Attributes, or place the Tradeable RECs into a reserve account within NEPOOL GIS, if such a reserve account is available.

(c) A Retail Electricity Provider's annual compliance filing shall include documentation demonstrating:

(1) the Tradeable RECs and Environmental Attributes the Provider has retired or placed into a reserve account, which the Provider is banking for use in one of the following three years;

(2) the previously banked Tradeable RECs and Attributes the Provider is using to satisfy its Tier I and II obligations for the compliance year;

(3) the previously banked Tradeable RECs and Attributes the Provider is retaining for use in future years;

(4) for subdivisions (1) through (3) of this subsection, the year the Tradeable RECs and Attributes were created; and

(5) all other information required by the compliance spreadsheet, which must be included with the Provider's annual compliance filing under section 4.419 of this rule.

4.406 Qualification of Generation Facilities for Tiers I and II

(a) A facility or group of facilities seeking to be qualified for Tier I or II of the RES shall have a qualification registration or application submitted to the Commission pursuant to the requirements of this section. A facility that qualifies as a Tier II resource automatically qualifies as a Tier I resource. Facilities that qualify as a Tier I or II resource shall receive a statement of qualification from the Commission, and the Commission shall notify the NEPOOL GIS administrator of newly qualified facilities on a monthly basis.

(b) Registration Process.

(1) A facility that meets the following requirements may receive a statement of qualification by means of the registration process described below.

(A) For Tier I, a facility that produces Renewable Energy, as defined in this rule, using any of the following fuel sources: methane and flammable gases from food waste, agricultural waste, or other organic materials, or from decay of sewage or landfill wastes; geothermal; hydroelectric; marine thermal or hydrokinetic; photovoltaic solar; concentrated solar power; and wind.

(B) For Tier II, a facility that:

(i) has a system capacity of 5 MW (AC) or less,

(ii) is directly connected to the subtransmission or distribution system of a Vermont Retail Electricity Provider,

(iii) came into service after June 30, 2015, and

(iv) produces New Renewable Energy, as defined in this rule, using any of the following fuel sources: methane and flammable gases from food waste, agricultural waste, or other organic materials, or from decay of sewage or landfill wastes; geothermal; hydroelectric that has received a water quality certification pursuant to 33 U.S.C. § 1341 from the Vermont Agency of Natural Resources after January 1, 1987, or from the Low Impact Hydropower Institute; marine thermal or hydrokinetic; photovoltaic solar; concentrated solar power; and wind.

(2) A facility seeking a statement of qualification through registration shall submit a complete registration on a form provided by the Commission, which shall include:

(A) Vermont certificate of public good number, if applicable,

(B) NEPOOL GIS identification number,

(C) Plant Capacity,

(D) the Retail Electricity Provider system or transmission system with which the facility is interconnected,

(E) the date the facility came into service, if the facility seeks to be qualified as a Tier II resource,

(F) fuel source, and

(G) any other information required by the Commission's registration form.

(3) A facility that complies with the requirements of Tier I or II and files a complete registration form by the 15th day of a month should receive a statement of qualification from the Commission within 15 days of the 15th day of the month; however, the expiration of this time period without the receipt of a statement of qualification does not constitute a determination that the facility is qualified. The Commission shall provide Tier I and II qualifications to NEPOOL GIS on a monthly basis.

(c) Application Process. For a facility not included under subdivision (b)(1) of this section that is seeking to qualify as a Tier I or II resource, the facility shall submit a complete application requesting a statement of qualification.

(1) The application shall be filed on a form provided by the Commission, which shall include all the information listed in subdivision (b)(2) of this section.

(2) The Department and the Vermont Agency of Natural Resources shall have 30 days from the date a complete application is posted on ePUC, the Commission's electronic filing system, to submit any comments on the application, including whether the Commission should conduct further proceedings to determine whether the facility should receive a statement of qualification.

(3) Following the 30-day comment period described above, the Commission may issue a statement of qualification, if the facility qualifies as a Tier I or II resource, or may open an investigation to determine whether such a statement should be issued.

(d) Aggregated Facilities. A Vermont Retail Electricity Provider may seek to aggregate a group of facilities that qualify as Tier II resources as a single facility for purposes of monitoring and reporting the output of those facilities to NEPOOL GIS.

(1)(A) To aggregate a group of facilities pursuant to this subsection, a Retail Electricity Provider shall submit an application to the Commission requesting a statement of qualification for its aggregated facilities, including the following information for each facility:

(i) address of the facility's location,

(ii) system capacity,

(iii) date the facility came into service,

(iv) fuel source,

(v) Vermont certificate of public good number, and

(vi) any other information requested by the Commission.

(B) In its review of an application for qualification of a group of aggregated facilities, the Commission may impose conditions related to the metering and monitoring of the output of the aggregated facilities, as appropriate.

(C) The Department shall have 30 days from the date a complete application is posted on ePUC, the Commission's electronic filing system, to submit any comments on the application.

(D) If the facilities qualify as Tier II resources and the Retail Electricity Provider has submitted all the information required by this subsection, the Commission shall issue a statement of qualification for the aggregated facilities.

(2)(A) Following Commission issuance of a statement of qualification for a group of aggregated facilities, the Retail Electricity Provider shall submit any modifications to its list of aggregated facilities on a quarterly basis for Commission approval. The update shall include:

(i) the NEPOOL GIS identification number for the previously approved aggregated facilities,

(ii) any modifications to the information regarding its previously approved facilities,

(iii) the information required by subdivision (1) of this subsection for each facility the Provider is seeking to add to its aggregated facilities, and

(iv) the new total capacity of the Provider's aggregated facilities if the Commission approves the update.

(B) A Provider shall submit its quarterly updates as follows: for NEPOOL GIS quarter 1, by June 1; for NEPOOL GIS quarter 2, by September 1; for NEPOOL GIS quarter 3, by December 1; and for NEPOOL GIS quarter 4, by March 1. The Department shall have 20 days from the date a complete quarterly update is posted on ePUC, the Commission's electronic filing system, to submit any comments on the update. If the quarterly update complies with the requirements of this subsection, the Provider should receive an approval from the Commission within 10 days of the date by which the Department must file its comments; however, the expiration of this time period without the receipt of an approval does not constitute a determination that the update is approved.

(e) Review of Tier I and II Facilities.

(1) Upon reasonable notice, the Commission or Department may audit a facility or group of facilities previously qualified as Tier I or II resources, including the inspection and copying of records, inspection of facilities, and other actions necessary to determine compliance with the RES.

(2) The Commission or Department may audit the accuracy of information, including electric generation information, reported to NEPOOL GIS for a facility or group of facilities approved under this section and may require the production of any records, documents, or relevant materials necessary to examine such accuracy.

(3) Upon notice and opportunity for hearing, the Commission may revoke a statement of qualification for a facility or group of facilities if it finds that a facility does not comply with the requirements of the RES or that the information submitted in the facility's registration or application form is not accurate.

4.407 Disclosures and Representations Regarding Retail Electricity Provider Generation Portfolios

(a) Pursuant to 30 V.S.A. § 8006(b), Retail Electricity Providers shall base any representations of the renewability of their generation portfolio on their most recently approved RES compliance filings.

(b) A Retail Electricity Provider shall publish on its website a representation of its portfolio mix, which shall include:

(1) A representation of all sources contributing more than 1% of the Retail Electricity Provider's generation portfolio, including a description of the fuel sources. In accounting for sources in its generation portfolio, the Provider shall include generation from net-metered systems;

(2) Appropriate categories to represent sources that do not individually exceed 1% of the generation portfolio; and

(3) A representation of the Retail Electricity Provider's Renewable Energy portfolio following all Tradeable REC and Environmental Attribute transactions as approved by the Commission in the Provider's most recent RES compliance filing.

(c) Retail Electricity Providers shall annually provide notice to their Customers of the availability of the above information by means of a bill insert, direct mail, e-mail, or other form of direct notice. This notice shall be provided within 90 days following the approval of a Provider's annual RES compliance filing.

PART III: TIER III

4.408 Conversion Method for Fossil-Fuel Savings from Energy Transformation Projects

(a) Pursuant to 30 V.S.A. §§ 8005(a)(3)(D) and 8005(a)(3)(F)(i), for the purpose of determining the eligibility and the application of an Energy Transformation Project's fossil-fuel savings to a Retail Electricity Provider's annual requirement, the Provider shall convert the net reduction in fossil-fuel consumption resulting from the Energy Transformation Project to a MWh equivalent of electric energy using the most recent year's approximate heat rate for electricity net generation from the "total fossil fuels" category as reported by the U.S. Energy Information Administration in its Monthly Energy Review.

(b) Retail Electricity Providers shall use a publicly available spreadsheet, provided and maintained by the Department, to determine the MWh-equivalent energy values. The Department shall update the spreadsheet on an annual basis with the appropriate U.S. Energy Information Administration values.

(c) If an Energy Transformation Project is funded by more than one regulated entity, the reduction in fossil-fuel consumption shall be pro-rated among the regulated entities that funded the project. For purposes of this section, "regulated entity" includes the Retail Electricity Providers and Energy Efficiency Utilities.

4.409 Process for Prior Approval of Energy Transformation Measures

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(ii), this section establishes a process for prior approval of Energy Transformation Measures.

(b) The Technical Advisory Group, originally established in relation to the Energy Efficiency Utilities, shall administer the process for prior approval of Energy Transformation Measures. The Technical Advisory Group includes the Department, the Energy Efficiency Utilities, and the Retail Electricity Providers.

(c) All Technical Advisory Group meetings related to Energy Transformation Measures shall be noticed and open to the public, and time shall be included in each meeting agenda for public input.

(d) The Technical Advisory Group shall:

(1) file with the Commission its analysis of how Energy Transformation Measures that it analyzes and approves meet the requirements of 30 V.S.A. § 8005(a)(3);

(2) file with the Commission, by no later than October 1 of each year, a list of measures that it reviewed during the previous calendar year; and

(3) include in its filing with the Commission appropriate information documenting the eligibility determinations that it has made for each measure.

(e) The Technical Advisory Group administrator may seek to recover its costs for participating in the Technical Advisory Group process as it relates to Energy Transformation Measures. The Technical Advisory Group administrator shall allocate such costs to each obligated Retail Electricity Provider based on the Provider's pro-rata share of annual retail electric sales in Vermont. The Technical Advisory Group administrator may enter into bilateral arrangements with obligated Providers as a manner of recovering such costs.

(f) Retail Electricity Providers may submit potential Energy Transformation Measures directly to the Technical Advisory Group for review, characterization, and prior approval. For those potential Energy Transformation Measures that are not immediately sponsored in the Technical Advisory Group process by a Provider, a measure proponent may present its measure to the Department for an initial review. If the Department concludes that the measure may be viable as an Energy Transformation Measure, the Department may share its review and conclusions with the Providers, who may determine whether to pursue full evaluation of the measure through the Technical Advisory Group process. The Department may also sponsor a measure for Technical Advisory Group review itself.

(g) A Retail Electricity Provider may petition the Commission for an alternative process for prior approval of potential Energy Transformation Projects in lieu of obtaining prior approval of an Energy Transformation Measure through the Technical Advisory Group process.

(h) There is no obligation for a Retail Electricity Provider to obtain prior approval of its Energy Transformation Projects.

(i) A Retail Electricity Provider that commenced a project prior to approval of the project as an Energy Transformation Measure through the Technical Advisory Group process may still seek approval of the measure from the Technical Advisory Group.

4.410 Cost-Effectiveness Screening of Energy Transformation Projects

Pursuant to 30 V.S.A. §§ 8005(a)(3)(C) and 8005(a)(3)(F)(iii), for purposes of cost-effectiveness screening of Energy Transformation Projects, a Retail Electricity Provider shall only offer Energy Transformation Projects that meet the following criteria:

(1) For efficiency measures that may be offered by Energy Efficiency Utilities pursuant to 30 V.S.A. § 209(d), including those measures identified in the Technical Reference Manual, the Retail Electricity Provider shall assess the eligibility of an Energy Transformation Project that is an efficiency measure using the statewide cost-effectiveness screening tools provided by the Department.

(2) Over the Energy Transformation Project's life, the project shall result in a net reduction in fossil fuel consumed by the Retail Electricity Provider's Customers and a reduction in the emission of greenhouse gases attributable to that consumption, whether or not the fuel is supplied by the Provider.

(3) The Energy Transformation Project shall meet the need for its goods or services at the lowest present-value life-cycle cost, including environmental and economic costs. This evaluation shall include an analysis of alternatives that do not increase electric consumption. If a Retail Electricity Provider's Integrated Resource Plan includes an analysis of alternatives, the Provider's Tier III annual plan shall reference the analysis in the Integrated Resource Plan and shall include any significant changes. If a Provider's Integrated Resource Plan does not include an analysis of alternatives, the Provider's Tier III annual plan shall include the analysis.

(4) Cost-effectiveness screening shall quantify:

(A) administrative and implementation costs, including those costs associated with the Technical Advisory Group's measure characterization, project design, evaluation, measurement, and verification; and

(B) costs and benefits associated with increased electric sales and financing and lease income.

(5) Each Energy Transformation Project, including an Energy Transformation Project identified as cost-effective through the statewide cost-effectiveness screening tool, shall in total

cost the Retail Electricity Provider less per MWh of energy savings than the applicable Alternative Compliance Payment.

(A) The total cost of an Energy Transformation Project shall include administrative and implementation costs.

(B) A Retail Electricity Provider may use net costs when assessing whether an Energy Transformation Project costs less than the applicable Alternative Compliance Payment. If a Provider uses net costs, the Provider shall provide the assumptions used in its analysis of net costs.

(6) A Retail Electricity Provider's Tier III annual plan, required under section 4.417 of this rule, shall include reporting on cost/benefit accounting at the Energy Transformation Program level, including cost/benefit analyses for purposes of future-year planning when possible.

(7) For purposes of completing cost-effectiveness screenings of Energy Transformation Projects and evaluating the costs of Energy Transformation Projects relative to the Alternative Compliance Payment, the following costs shall not be included:

(A) Planning and development costs that a Retail Electricity Provider incurs before beginning to implement an Energy Transformation Project, and

(B) The regulatory costs of participating in Commission proceedings and meetings with the Department regarding Energy Transformation Projects.

4.411 Banking and Trading in Tier III

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(iv), Retail Electricity Providers may bank any unused fossil-fuel reductions from Energy Transformation Projects for compliance in future years. However, pursuant to 30 V.S.A. § 8004(c), Tier II Tradeable RECs and Environmental Attributes that have been banked may only be used in one of the following three years whether they are used to satisfy a Tier II or Tier III obligation.

(b) In its annual compliance filings, a Retail Electricity Provider shall:

(1) document any excess Tier III fossil-fuel reductions that it seeks to retain for compliance in future years;

(2) indicate any Tier III fossil-fuel reductions from prior years that it seeks to claim to meet its current year compliance obligation;

(3) indicate whether and which Tier II credits it seeks to apply towards its Tier III obligations in the current year; and

(4) provide documentation of the current amount of banked Tier III fossil-fuel reductions held by the Provider.

(c) Trading of Tier III fossil-fuel reductions is prohibited.

4.412 Evaluation, Measurement, and Verification of Energy Transformation Projects

Pursuant to 30 V.S.A. § 8005(a)(3)(F)(v), to establish and validate an Energy Transformation Project's claimed fossil-fuel reductions, avoided greenhouse gas emissions, conversion to MWh equivalent, cost-effectiveness, and, if applicable, energy savings, the following documentation and verification process shall be employed:

(1) The Department shall conduct an annual savings verification to assess Retail Electricity Providers' annual savings claims. The Department shall work with Providers to attempt to resolve any issues that may lead to adjustments to Providers' annual savings claims.

(2) Savings verification shall include an analysis of project data from Retail Electricity Provider tracking systems, review of project files, and any necessary field verification visits.

(3) For Energy Transformation Projects, where savings assumptions have not been established through the Technical Reference Manual or do not apply, a Retail Electricity Provider shall maintain in its files documentation of all assumptions and calculations used to establish its savings claims.

(4) By March 15 of each year, a Retail Electricity Provider shall submit a report to the Commission and the Department stating its savings claims for its Energy Transformation Projects for the previous year. The report shall also include Energy Transformation Project participation, spending, and benefits by Customer sector (residential, commercial and industrial, and low-income), as required by section 4.413(c)(1) of this rule. The Commission shall provide a summary table template, created in collaboration with the Department and Providers, to be included in the report. A Provider's annual report shall include a completed summary table.

(5) By June 1 of each year, the Department shall provide recommendations to the Commission regarding the verified savings achieved by Retail Electricity Providers for the previous year.

(6) Within 15 days of the Department's recommendation each year, Retail Electricity Providers and other interested parties may offer comments on the Department's recommendation to the Commission.

(7) If the Department or any interested party recommends that the Commission reject any of a Retail Electricity Provider's Energy Transformation Project fossil-fuel savings or if the Commission finds that a Provider's savings claims do not comply with the requirements of the RES statute or rule, the Commission shall, by August 20 of each year, either issue an order accepting or rejecting those savings claims or issue an order notifying the Provider that the Commission is still considering whether those particular savings claims comply with the RES statute and rule. If the Commission is still considering whether the savings claims comply with the RES statute and rule, the Provider's compliance filing required under section 4.419 of this rule need not address that specific portion of the Provider's Tier III obligation still under consideration. Once the Commission rules on the particular savings claims, if the Commission determines that the savings claims do not comply with the RES statute or rule, the Provider shall have 30 days to file alternative Tier III savings claims, Tier II Tradeable RECs or Environmental

Attributes, Alternative Compliance Payments sufficient to satisfy the portion of the Provider's Tier III obligation that the Commission rejected, or, pursuant to section 4.401(a)(3)(A) of this rule, a request for a reduced Tier III obligation.

(8) Retail Electricity Providers' Tier III annual plans, required under section 4.417 of this rule, may include an evaluation, measurement, and verification plan, including estimated plan costs. Providers are encouraged to consult with the Department in advance of filing their Tier III annual plans to develop estimated evaluation, measurement, and verification plan costs.

(9) Evaluation, measurement, and verification costs may be billed to Retail Electricity Providers using the Department's authority to allocate expenses pursuant to 30 V.S.A. § 21 and shall be allocated proportionally based upon the costs to evaluate each Retail Electricity Provider's share of Energy Transformation Projects. For partnership programs between a Provider and an Energy Efficiency Utility, costs may be allocated according to an agreed-upon cost-allocation methodology.

(10) In addition to annual savings verifications, the Department shall conduct periodic evaluations of Energy Transformation Projects or classes of projects.

(11) Changes to Energy Transformation Project savings claims resulting from periodic evaluations shall not retroactively reduce claims made on behalf of a measure approved pursuant to section 4.409 of this rule or reduce verified claims carried forward pursuant to section 4.411 of this rule. However, such changes may be applied to the treatment of savings claims from projects undertaken in future years.

4.413 Equitable Opportunity to Participate in and Benefit from Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(vi), all ratepayers shall have an equitable opportunity to participate in and benefit from Energy Transformation Projects, regardless of rate class, income level, or Provider service territory.

(b) A Retail Electricity Provider that chooses to meet any portion of its Tier III obligations through Energy Transformation Projects in a given year shall make Energy Transformation Project opportunities available to all ratepayers, regardless of rate class or income level.

(1) For purposes of this rule, rate class shall be broadly defined as Customer class or sector – that is, residential Customers and commercial and industrial Customers.

(2) For purposes of this rule, income level shall be broadly defined as low-income and non-low-income.

(A) A low-income Customer shall be defined as a Customer whose household income is at or below 80% of Vermont statewide median income.

(B) The percentage of low-income households in each Retail Electricity Provider's service territory shall be assumed to be the statewide percentage of low-income households.

(C) The Department may provide the statewide percentage of low-income households to the Providers on an annual basis for the purposes of planning and tracking their Energy Transformation Projects.

(D) A Provider may petition the Commission for an alternative definition of "low-income Customer," and for a different percentage of low-income Customers to be applicable to its service territory. Any such petition must demonstrate why an alternative definition or percentage is necessary based on the unique circumstances of the Provider and its Customers.

(c) Tracking Equitable Opportunity.

(1) A Retail Electricity Provider shall track and report Energy Transformation Project participation, spending, and benefits by Customer sector (residential, commercial and industrial, and low-income) in each year that it chooses to meet any portion of its Tier III obligations through Energy Transformation Projects.

(2) Consideration of whether a Provider has provided equitable opportunities to its Customers shall be measured over the course of the RES program.

(3) A Provider shall endeavor to provide equitable opportunities to its Customer sectors in rough proportion to each Customer sector's annual retail sales.

(4) A Provider may petition the Commission for alternative measurement criteria. Any such petition must demonstrate why alternative measurement criteria are necessary based on the unique circumstances of the Provider and its Customers.

(d) When offering Energy Transformation Projects, a Retail Electricity Provider must provide information, such as up-front costs, benefits, long-term maintenance, options available to overcome first-cost barriers, and other efficiency and energy support services available, that is consistent, transparent, and unbiased. When an Energy Transformation Project is being offered in more than one service territory, the Providers shall ensure, as part of their coordination, that all such information is provided in a consistent manner.

(e) A Retail Electricity Provider may provide equitable opportunities to its Customers through participation in statewide initiatives, such as a standard suite of Energy Transformation Projects or a common set of technologies.

4.414 Coordinated Delivery of Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(vii), in developing Energy Transformation Projects and programs to implement those projects, Retail Electricity Providers shall coordinate with other energy efficiency services and programming, including the Energy Efficiency Utilities, weatherization agencies, and affordable housing agencies (collectively, "Efficiency Service Providers").

(b) In Retail Electricity Providers' Tier III annual plans, required under section 4.417 of this rule, Retail Electricity Providers shall demonstrate their efforts to collaborate with Efficiency Service Providers. Outside of the annual planning process, Retail Electricity Providers shall continue to

share information about Energy Transformation Project and program elements, such as incentive structures and marketing and implementation strategies, with other Retail Electricity Providers and Efficiency Service Providers.

(c) In developing Energy Transformation Projects and programs to implement those projects, Retail Electricity Providers shall seek to efficiently utilize the resources of other Retail Electricity Providers and Efficiency Service Providers.

(d) When Efficiency Service Provider projects and Retail Electricity Provider projects overlap due to similar measures, projects, or programs, the providers shall work together to negotiate reasonable allocations of savings and costs to be included in the Tier III annual plans and accounted for in the annual compliance reports for Commission review. Should providers be unable to reach a consensus, providers may petition the Commission for a resolution. In addition, the Department may assist providers in the mediation of disputes related to the allocation of costs and savings.

(e) Efficiency Service Providers and Retail Electricity Providers may enter into agreements to share resources across a Retail Electricity Provider's service territory in order to efficiently utilize staff and resources, and these agreements may result in single-point-of-contact services for some Energy Transformation Projects and programs to implement those projects.

(f)(1) Retail Electricity Providers or their partners in offering Energy Transformation Projects and programs to implement those projects shall advise Customers of:

(A) the up-front costs, benefits, and long-term maintenance requirements for Customer-appropriate technologies,

(B) options available to overcome first-cost barriers to participation, and

(C) other efficiency and energy support services available.

(2) Retail Electricity Providers or their partners in offering Energy Transformation Projects shall make Customer referrals for additional information or special services.

4.415 Best Practices and Minimum Standards

Pursuant to 30 V.S.A. § 8005(a)(3)(F)(viii), if an Energy Transformation Project increases the use of electric energy, the project shall incorporate best practices for demand management, use technologies appropriate for Vermont, and encourage the installation of the technologies in buildings that meet minimum energy performance standards. To meet this requirement, Retail Electricity Providers shall follow and comply with the following provisions.

(1) Best practices for demand management may include:

(A) the enrollment of a participating Customer in an advanced rate program. Advanced rates may include critical peak pricing, time-of-use rates, or controllable load rates or riders;

(B) verifying a high level of building performance to reduce electric demand; or

(C) non-monetary behavioral programs to avoid electricity use during peak days or hours.

(2) Customer and contractor education shall include the advantages and disadvantages associated with an Energy Transformation Project, considering, as applicable, building or vehicle characteristics, fuel types, prices, and Customer economics. Education, outreach, and marketing shall aim to deliver uniform statewide messaging and maximize existing state resources.

(3) Marketing information presented to Customers on savings associated with Energy Transformation Projects shall be accurate, reflect current fuel prices, and address Customer-specific conditions.

(4) A Retail Electricity Provider seeking to verify that an Energy Transformation Project meets minimum building performance standards shall assess the participating Customer's building using the building performance model provided by the Department. The building performance model shall be developed and updated regularly through the Technical Advisory Group process.

(5) The savings that a Retail Electricity Provider may claim for the installation of a prescriptive Energy Transformation Measure in a building achieving minimum energy performance standards shall be determined through the Technical Advisory Group process.

(6) For a Retail Electricity Provider implementing Energy Transformation Projects that increase the use of electric energy, the Provider's Tier III annual plan shall include:

(A) reference to the load forecast developed in the Provider's most recently Commission-approved Integrated Resource Plan and any relevant updates to or major deviations from the assumptions used in that load forecast;

(B) a discussion of the available options for controlling load and their effectiveness and costs, the options the Provider is implementing and why, and whether the projected volume of Energy Transformation Projects warrants demand management activities;

(C) strategies for encouraging the installation of technologies in buildings that meet minimum energy performance standards, as applicable; and

(D) strategies for Customer education, outreach, and marketing.

4.416 Specific Types of Energy Transformation Projects

Low-income Weatherization. If proposing a low-income weatherization Energy Transformation Project, a Retail Electricity Provider may do any of the following:

(1) purchase previously created verifiable energy savings from a low-income weatherization provider, authorized under Vermont statute, so long as the energy savings were created during the compliance year within the Retail Electricity Provider's service territory and the Retail Electricity Provider advertised the low-income weatherization provider's services to its Customers or members. For purposes of 30 V.S.A. § 8005(a)(3)(E), the previously created savings shall be treated as the incremental energy savings and the additional revenue paid for the savings should be used by the low-income weatherization provider, like any other grant funds it

receives from the Office of Economic Opportunity, to complete low-income weatherization work in any Retail Electricity Provider's service territory.

(2) pay a rate per MWh of lifetime energy savings to a low-income weatherization provider that shall be used by the low-income weatherization provider to fund low-income weatherization projects anywhere within the state, so long as the low-income weatherization provider provides low-income weatherization services within the Retail Electricity Provider's service territory and the Retail Electricity Provider contemporaneously advertises the low-income weatherization services to its Customers or members. The MWh Rate shall be updated annually, and the lesser of the calculated rate or the Alternative Compliance Payment shall be established as the rate per MWh of lifetime energy savings to be used for the calendar year. By October 1 of each year, the Vermont Office of Economic Opportunity shall file the updated MWh Rate with the Commission. The following definitions and calculations shall apply to this subsection.

(A) "Heat Rate" is the official conversion factor to translate from a representation of savings in Mmbtu to MWh.

(B) "Project Lifetime" shall be determined for each weatherization project using an energy modeling software program approved for use by the Vermont Office of Economic Opportunity and the United States Department of Energy.

(C) "Mmbtu Lifetime Savings Projections" shall be determined for each weatherization project using an energy modeling software program approved for use by the Vermont Office of Economic Opportunity and the United States Department of Energy.

(D) "MWh Lifetime Savings Projections" shall be determined by multiplying the projected Mmbtu Lifetime Savings Projections from a weatherization project by the Heat Rate.

(E) The MWh Rate shall be updated annually by the Vermont Office of Economic Opportunity. The MWh Rate to be used for each calendar year shall be determined by:

(i) summing the MWh Lifetime Savings Projections achieved by the Home Weatherization Assistance Program during the most recently completed program year,

(ii) summing the material and onsite labor costs incurred during the most recently completed program year as they are represented in the Vermont Office of Economic Opportunity and United States Department of Energy approved energy modeling software,

(iii) dividing the material and onsite labor costs by the MWh Lifetime Savings Projections, and

(iv) rounding to the nearest whole dollar increment.

(3) propose alternatives to the foregoing options that satisfy the applicable requirements of 30 V.S.A. § 8005 and this rule.

4.417 Tier III Annual Planning

(a) A Retail Electricity Provider shall file its Tier III annual plan no later than November 1 of the year immediately prior to the start of the next compliance year. The Commission shall provide a summary table template, created in collaboration with the Department and Providers, to be included in the plan. A Provider's annual plan shall include a completed summary table.

(b) Tier III annual plans shall include the following information:

(1) A description of the estimated Tier III compliance obligation, as determined pursuant to 30 V.S.A. § 8005(a)(3)(B), for the following compliance year and a description of the overall strategy to be implemented to meet the Tier III compliance obligation in the following compliance year, including use of any banked Tier III fossil-fuel reductions, use of any excess Tier II Tradeable RECs or Environmental Attributes, and implementation of any Energy Transformation Projects.

(2) When a Retail Electricity Provider's Tier III strategy includes implementation of Energy Transformation Projects, its Tier III annual plan shall include the following information as well as any requirements specified in section 4.412(8) of this rule:

(A) a description of the types of Energy Transformation Projects that will be undertaken, including the types of measures to be implemented and the anticipated number of participants, with sufficient information for the Department to develop an evaluation, measurement, and verification plan and budget;

(B) as required by section 4.413 of this rule, a description of how all ratepayers will have an equitable opportunity to participate in and benefit from the Energy Transformation Projects regardless of rate class or income level;

(C) as required by section 4.414 of this rule, a description of any Energy Transformation Project collaborative efforts, including a methodology for allocating project costs and savings among Efficiency Service Providers;

(D) when a Retail Electricity Provider plans to implement an Energy Transformation Project without coordinating with an Efficiency Service Provider, an explanation, pursuant to 30 V.S.A. § 8005(a)(3)(E)(i), of why the delivery by the Retail Electricity Provider is more cost-effective than delivery by another person or that there is no person other than the Retail Electricity Provider with the expertise or capability to deliver the goods or services;

(E) as required by section 4.415 of this rule, when a Retail Electricity Provider plans to implement Energy Transformation Projects that are likely to increase electricity consumption, reference to the load forecast developed in the Provider's most recent Integrated Resource Plan and any relevant updates to or major deviations from the assumptions used in that load forecast; a discussion of the available options for controlling load and their effectiveness and costs, the options the Provider is implementing and why, and whether the projected volume of Energy Transformation Projects warrants demand management activities; strategies to be used for encouraging the installation of technologies in buildings that meet minimum energy performance

standards, as applicable; and strategies to be used for Customer education, outreach, and marketing;

(F) as required by section 4.410 of this rule, a cost/benefit accounting at the Energy Transformation Program level, including cost/benefit analyses for purposes of future-year planning when possible; and

(G) projected planning and development costs that will be incurred before the Provider fully implements an Energy Transformation Project, and projected administrative costs.

(c) Comments on a Tier III annual plan shall be submitted by the December 1 immediately following the date a plan was submitted.

(d) If the Commission has questions about a Tier III annual plan, it may schedule a workshop. If the Commission finds, after reviewing a Tier III annual plan and any comments filed about it, that the plan does not include the information required by subsection (b) of this section, the Commission shall notify the Retail Electricity Provider, the Department, and any entities that commented on the Provider's Tier III annual plan of the specific deficiency or deficiencies in the plan, and may issue an order directing the Provider to file an amended plan or opening an investigation. The Commission shall aim to provide such notice by December 31.

4.418 Withdrawal and Addition of Energy Transformation Projects

(a) Pursuant to 30 V.S.A. § 8005(a)(3)(F)(ix), if a Retail Electricity Provider concludes that an ongoing Energy Transformation Project should be withdrawn or terminated because it no longer meets the eligibility criteria due to one or more factors beyond the control of the project and the Provider, the Provider shall give notice to the Commission, the Department, any Customers or other entities participating in or who applied to participate in the Energy Transformation Project who may be affected by the withdrawal or termination, and any affected project partners. Notice shall be provided at least 30 days in advance of the withdrawal or termination.

(b) If a Retail Electricity Provider wishes to add an Energy Transformation Project to its current Tier III annual plan, the Provider shall:

(1) notify the Commission, the Department, and any project partners at least 30 days prior to implementation,

(2) provide the information required in an annual plan, as specified in section 4.417 of this rule, and

(3) as necessary, request an estimate from the Department of any additional evaluation, measurement, and verification costs.

PART IV: COMPLIANCE FILINGS

4.419 Filing Schedule and Requirements

(a) No later than August 31 of each year, a Retail Electricity Provider shall submit its demonstration of compliance with all Tiers of the RES, including documentation of its total retail

sales, documentation of the number, type, and vintage of Tradeable RECs and Environmental Attributes it used to obtain compliance, the fossil-fuel savings attained from Energy Transformation Projects, and the information required by sections 4.405 and 4.411 of this rule. The Commission shall provide a compliance spreadsheet template, created in collaboration with the Department and Providers, to be included in the filing. The compliance spreadsheet template may define Tier III administrative costs, as necessary.

(b) A Provider's compliance filing shall include a completed compliance spreadsheet and a report of Tier III administrative costs; regulatory costs, including costs to participate in Commission proceedings and Department meetings; and planning and development costs.

(c) The Department and other interested parties shall have 30 days to submit any comments on a Retail Electricity Provider's compliance filing.

4.420 Determination of Compliance and Alternative Compliance Payment

(a) Following the submittal of a Retail Electricity Provider's annual compliance filing, the Commission shall determine whether the Provider has met its RES obligations, and in the event it has not, shall determine the appropriate Alternative Compliance Payment.

(b) Pursuant to 30 V.S.A. § 8004(d), all required Alternative Compliance Payments shall be paid to the Clean Energy Development Fund established under 30 V.S.A. § 8015 within 30 days of issuance of a Commission order directing payment.

4.421 Update of Annual Compliance Rates

Pursuant to 30 V.S.A. § 8005(a)(4)(B), annually on or before September 1, the Commission shall announce the applicable Alternative Compliance Payment effective for the compliance year beginning on the following January 1.