

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 8550

Investigation re: establishment of the )  
Renewable Energy Standard program )

Order entered: 6/28/2016

**ORDER IMPLEMENTING THE RENEWABLE ENERGY STANDARD**

**Table of Contents**

I. Introduction. . . . .	2
II. Procedural History. . . . .	3
III. Discussion - Tiers I and II . . . . .	5
A. Objections to the March 15 Order. . . . .	5
B. Eligibility of Energy from Hydro-Quebec. . . . .	6
C. Banking of Tier I & II Credits.. . . .	8
D. Disclosure of Generation Sources and Renewable Attributes. . . . .	11
E. List of Qualified Facilities. . . . .	15
F. Aggregation Process for Net-Metered and Behind-the-Meter Generation. . . . .	18
IV. Discussion - Tier III . . . . .	20
A. Conversion Methodology. . . . .	20
B. Process for Prior Approval. . . . .	20
C. Cost-Effectiveness Screening. . . . .	22
D. Banking and Trading of Tier III Savings. . . . .	25
E. Evaluation, Measurement, and Verification. . . . .	31
F. Equitable Opportunity.. . . .	33
G. Partnership and Collaboration. . . . .	43
H. Best Practices and Minimum Standards. . . . .	48
I. Process for Termination or Withdrawal of Energy Transformation Projects. . . . .	51
J. Tier III Annual Planning. . . . .	52
K. 2020 Review. . . . .	56
L. Use of Tier II RECs for Tier III Compliance by 100% Renewable Providers. . . . .	58
V. Discussion - All Tiers . . . . .	61
A. Schedule for Compliance Filings. . . . .	61
B. Alternative Compliance Rates. . . . .	63

C. Adoption of March 15 Order. . . . . 63

VI. Conclusion. . . . . 63

VII. Order . . . . . 64

**I. INTRODUCTION**

In this Order, the Vermont Public Service Board (“Board”) directs the implementation of the Renewable Energy Standard program (“RES”), which requires Vermont retail electric providers (“DUs”) to acquire specified amounts of renewable energy, in the form of renewable attributes or Renewable Energy Credits (“RECs”), and to achieve fossil-fuel savings from energy transformation projects. Section 8 of Public Act No. 56 of 2015 (“Act 56”) directs the Board to implement the RES by means of an “an order, to take effect on January 1, 2017,” followed by a rulemaking.

The RES establishes aggressive targets requiring utilities to procure renewable energy for the majority of their generation portfolios. In addition, the RES contains a first-in-the-nation program whereby a DU can meet their portfolio requirements by investing in projects that will reduce fossil-fuel consumption by their customers. These projects could include items like home weatherization projects to reduce fuel oil purchases by customers, the replacement of fossil-fuel-based heating systems with electric or biomass energy, or investments in clean forms of transportation like electric vehicles. In combination, these requirements will work to further reduce Vermonters’ reliance on fossil fuels across a range of sectors.

The structure of the RES is divided into three categories or tiers. The first tier (“Tier I”) requires DUs to procure an amount of renewable energy equivalent to 55% of their annual retail electric sales for the year 2017. This amount increases by 4% every third January 1 thereafter, eventually reaching 75% in 2032.

The second tier (“Tier II”) requires DUs to procure an amount of renewable energy equivalent to 1% of their annual retail sales from distributed generation resources starting in

2017.<sup>1</sup> This amount increases by three-fifths of a percent each year, eventually reaching 10% in 2032. Pursuant to Section 8005(a)(1)(C), Tier II resources are also counted as part of a DU's Tier I requirement.

The third tier of the RES ("Tier III") requires that DUs either procure additional renewable distributed generation eligible for Tier II or acquire fossil-fuel savings from energy transformation projects. Energy transformation projects are those that reduce fossil fuel consumed by DU customers and the emission of greenhouse gases attributable to that consumption. For Tier III, the RES establishes a required amount of 2% of a DU's annual retail sales in 2017, increasing by two-thirds of a percent each year and reaching 12% in 2032.<sup>2</sup>

Act 56 created certain rules for the RES but left some issues to be resolved by the Board. Based on the requirements of Section 8 of Act 56, the Board has conducted and Board staff held a series of working group meetings and two workshops with a variety of stakeholders directed at identifying and resolving issues associated with the implementation of the RES. In addition, on March 15, 2016, the Board issued an interim order ruling on several aspects of the RES program.<sup>3</sup> In this current Order, the Board establishes, where necessary, further parameters of the RES, ruling on those issues identified through the process described above, and directs DUs to comply with the RES in the manner described in this Order.

## **II. PROCEDURAL HISTORY**

On August 7, 2015, the Board opened an investigation in this Docket, pursuant to the requirements of Act 56.

On August 26, 2015, the Board convened a prehearing conference.

---

1. For purposes of the RES, distributed generation resources are defined in 30 V.S.A. § 8005(a)(2)(B) as either: (1) new renewable energy facilities that have a plant capacity of 5 MW or less and that are: (a) directly connected to a DU's subtransmission system or distribution system or (b) identified in an approved plan to defer a transmission system upgrade pursuant to Section 8005(a)(1)(B), or (2) a net-metering system, provided the system is producing new renewable energy and the interconnecting DU owns and retires the system's environmental attributes. To qualify as new renewable energy under the statute, a facility must have commenced operation after June 30, 2015.

2. Pursuant to Section 8005(a)(3)(B), certain municipal DUs have a modified Tier III requirement that commences in 2019.

3. *Investigation re: Establishment of the Renewable Energy Standard*, Docket 8550, Order of 3/15/16 (the "March 15 Order.")

On September 18, 2015, the Board issued a Prehearing Conference Memorandum and Scheduling Order (“Scheduling Order”) that reflected the schedule discussed at the prehearing conference.

Pursuant to the Scheduling Order, Board staff conducted a series of stakeholder working group meetings in the months of September, October, and November 2015 to discuss issues related to the implementation of the RES.

On December 4, 2015, comments addressing certain aspects of RES implementation were submitted by the City of Burlington Electric Department (“BED”), the Vermont Department of Public Service (“Department”), Green Mountain Power Corporation (“GMP”), the National Biodiesel Board, the New England Geothermal Professional Association (“NEGPA”), Renewable Energy Vermont (“REV”), Vermont Electric Power Producers, Inc. (“VEPPI”), Vermont Electric Cooperative, Inc. (“VEC”), Vermont Energy Investment Corporation (“VEIC”), the Vermont Fuel Dealers Association (“VFDA”), the Vermont Law School Energy Clinic (“VLS”), the Vermont Public Power Supply Authority (“VPPSA”), Washington Electric Cooperative, Inc. (“WEC”), and Thomas Weiss (“Mr. Weiss”).

On December 11, 2015, the Board convened a workshop to address the matters that were the subject of participants’ December 4<sup>th</sup> filings.

On December 18, 2015, additional comments were filed by BED, the Building Performance Professionals Association of Vermont (“BPPA”), Conservation Law Foundation (“CLF”), the Department, GMP, REV, VEC, VEIC, VPPSA, WEC, and Mr. Weiss.

On December 23, 2015, BED, VEIC, and GMP also filed additional comments.

In January, February, March, and April of 2016, several more working group meetings were held.

On January 26, 2016, the DUs and energy efficiency utilities (“EEUs”) filed a straw proposal related to the implementation of Tier III (the “Tier III Proposal”) for consideration in the working group meetings.

On February 8, 2016, the Department filed a revised, red-line version of the Tier III Proposal.

On March 15, 2016, the Board issued the March 15 Order, which determined several program elements and set out a schedule for the remainder of the proceeding.

On April 8, 2016, a second round of comments were filed by BPPA, BED, CLF, the Department, GMP, Ranger Solar, REV, the Stowe Electric Department (“Stowe”), VEC, VEIC, VPPSA, WEC, and Mr. Weiss.

On April 14, 2016, the Board held a workshop.

On and following May 6, 2016, another round of comments was filed by BPPA, BED, the Department, Hydro-Quebec, GMP, Green Mountain Geothermal, Ranger Solar, Stowe, VEC, VEIC, VPPSA, WEC, and Mr. Weiss.

### **III. DISCUSSION - TIERS I AND II**

#### **A. Objections to the March 15 Order**

##### **Participant Comments**

REV and Ranger Solar object to the process that the Board relied on in rendering the decisions contained in the March 15 Order. Specifically, REV and Ranger Solar argue that the March 15 Order “was issued without full input by stakeholders and procedurally is inconsistent with the process and deadlines established by Act 56 and the Board’s Scheduling Order in this proceeding.”<sup>4</sup> These participants point to Act 56’s deadline for a Board order initially implementing the RES “on or before July 1, 2016”<sup>5</sup> as a basis for why the Board acted too swiftly and the March 15 Order was premature. In their comments, REV and Ranger Solar state a desire to provide further comments on specific issues.

##### **Discussion**

Act 56 outlines a process for the Board to use in implementing the RES, including requirements for soliciting input from stakeholders and the public and requiring adoption of an order implementing the RES on or before July 1, 2016. Neither REV nor Ranger Solar has

---

4. Ranger Solar Comments at 1.

5. Act 56 Section 8(c)

articulated how an order issued in March fails to meet the statutory requirement of an order issued on or before July 1. Moreover, they have not made a compelling case that the process the Board relied on in developing the March 15 Order is inconsistent with the statutory requirements or the participants' expectations regarding the proceeding. Section 8 of Act 56 requires that the Board conduct "one or more workshops to solicit input of potentially affected parties and the public," as well as "provide an opportunity for submission of written comments."<sup>6</sup> Prior to the issuance of the March 15 Order, the Board's process on the issues raised by REV and Ranger Solar included several working group meetings, the submission of two rounds of written comments from participants, and a workshop. REV and Ranger Solar had a full opportunity to participate in every element of this process. In addition, REV, Ranger Solar, and other participants had adequate notice that the Board intended to issue a determination on the issues included in the March 15 Order, based on discussions at working group meetings, a schedule that contemplated an order following the first workshop, and a memorandum distributed to participants identifying a set of "issues that will need to be resolved at an earlier stage in the process."<sup>7</sup> Accordingly, we find no basis to conclude that our adoption of the March 15 Order was inconsistent with our obligations under Act 56 or the Scheduling Order, or that the process leading up to that Order failed to provide the public or affected parties with an opportunity to participate or comment.

Nevertheless, the Board requested comments from parties on the issues raised by REV and Ranger Solar's letters at the April 14 workshop, and we have considered their substantive objections to the March 15 Order in our discussion below.

## **B. Eligibility of Energy from Hydro-Quebec**

In the March 15 Order, the Board considered issues raised by the Department and DUs regarding the eligibility of energy and environmental attributes from Hydro-Quebec for the RES.

---

6. Act 56 at Section 8(b).

7. *Memorandum from Public Service Board staff to Participants in the Docket 8550 Tiers I & II Working Group*, issued on 11/4/15 at 1.

In their second-round comments, REV and Ranger Solar expressed opposition to the Board's conclusions in the March 15 Order.

### Participant Comments

In their comments, REV and Ranger Solar argue that the March 15 Order fails to establish a system for ensuring that environmental attributes received by DUs from Hydro-Quebec are eligible for the RES. REV and Ranger Solar argue that, at most, the Board should discount energy received from Hydro-Quebec by 10% due to the terms of the contracts, which require Hydro-Quebec to deliver at least 90% hydroelectric energy.

The Department, WEC, GMP, and VEC oppose REV's and Ranger Solar's comments, arguing that the attestation statements in Hydro-Quebec contracts constitute a legally binding obligation from Hydro-Quebec to state the actual delivery of hydroelectric energy to the DUs. In particular, these comments note that REV and Ranger Solar's proposed discounted treatment of energy received from Hydro-Quebec could actually result in a less accurate accounting of energy than that outlined in the March 15 Order, as it would apply a flat discount to said energy, rather than rely on fluctuations that may be captured in the annual attestation statements.

Hydro-Quebec also submitted comments in response to REV's and Ranger Solar's comments in this area. In its comments, Hydro-Quebec maintains that it follows "world-class standards"<sup>8</sup> to verify the accuracy of the information contained in its attestation statements. Hydro-Quebec further states that this process results in an independently audited statement, conducted consistently with international standards, confirming the accuracy of its resource mix.<sup>9</sup>

### Discussion

REV's and Ranger Solar's comments appear to misconstrue our March 15 Order with respect to the treatment of resources from Hydro-Quebec. The March 15 Order is not a blanket

---

8. Hydro-Quebec Comments at 1.

9. Specifically, Hydro-Quebec states that the information in its attestation statements is reviewed by the Bureau de Normalisation de Quebec, which is an independent body accredited under the International Standards Organization's standards for verifying greenhouse gas emissions by a recognized member of the International Accreditation Forum and licensed by AccountAbility.

qualification of the RES compliance of all energy procured by the DUs from Hydro-Quebec. Rather, the Order requires that DUs seeking to use such energy for RES compliance must “provide appropriate documentation to demonstrate that the power purchased [from Hydro-Quebec] is eligible for the RES, including the fuel source utilized and whether the attributes have been claimed by any other party or in any other jurisdiction.”<sup>10</sup> The Board will review the documentation provided by DUs and determine the amount of eligible energy received from Hydro-Quebec at that time.<sup>11</sup> In addition, we are not persuaded by REV’s or Ranger Solar’s argument that the Board should not rely on the attestation statements provided by Hydro-Quebec. Neither REV nor Ranger Solar has articulated why the attestation is insufficient to demonstrate DU ownership of the environmental attributes associated with resources from Hydro-Quebec, particularly in light of the auditing and verification process Hydro-Quebec has described.

### **C. Banking of Tier I & II Credits**

Section 8004(c) provides that the:

Board shall allow a provider that has met the required amount of renewable energy in a given year, commencing with 2017, to retain tradeable renewable energy credits created or purchased in excess of that amount for application to the provider’s required amount of renewable energy in one of the following three years.

In the March 15 Order, the Board concluded that it lacked the authority to place limits on the banking of RECs or environmental attributes in Tiers I and II other than the three-year limitation imposed by the statute. In the March 15 Order, the Board also outlined the process for DUs to bank and monitor banked RECs, directing DUs to hold banked RECs in reserve accounts and to submit annual documentation of how many RECs have been used or banked. In the second round of comments, several participants proposed modifications of these aspects of the March 15 Order.

---

10. March 15 Order at 6.

11. We further observe that a methodology similar to that adopted by the Board in the March 15 Order appears to be contemplated by the statute, which provides that, in cases where electricity is received from a system of generating resources, the Board will count “that portion generated by a technology that qualifies as renewable.” 30 V.S.A. § 8002(17)(C).



### Participant Comments

REV argues that the Board erred in its March 15 Order when it found that it did not have the authority to impose limitations on the banking of Tiers I and II RECs.<sup>12</sup> REV argues that the Board's resulting REC banking provisions hinder the achievement of Vermont's statutory climate pollution reduction and renewable energy goals. REV also asserts that there are already a number of mechanisms within Act 56 that allow for utilities to mitigate the potential for noncompliance with RES requirements that the Board is trying to address through its REC banking provisions.

REV argues that the Board has broad discretion in interpreting statutes and that the courts give great deference to Board decisions. Furthermore, REV argues that the statutory language addressing REC banking is far from unambiguous, as the Board found, and conflicts with other related legislation that clearly promotes renewable energy development generally and "viable markets" for that development. Accordingly, REV argues the Board should have imposed banking limitations. Specifically, REV supports a 10% banking limitation for Tier I, but strongly recommends that banking for Tier II also be 10%.

In summary, REV thinks "the Board's plain meaning analysis of the REC banking provision under the March 15 Order is unsupported because the legislative intent is not evident from the plain meaning of the statute itself, would conflict with the broad jurisdiction granted to the Board under 30 V.S.A. § [2]09 and, significantly, would undermine accomplishment of overarching goals established by the General Assembly to reduce greenhouse gas emissions and promote renewable energy."<sup>13</sup>

Regarding Tier I and II credits, GMP supports the use of the reserve transaction system in the process of RES compliance. GMP suggests that the use of a reserve transaction has the effect of essentially removing the attributes associated with the reserved certificates from the New England Power Pool Generation Information System ("GIS") in that period – creating a small mismatch between the total load and total attributes in the GIS system. While GMP contends that these mismatches will not be a meaningful concern if they occur on the scale that reserve

---

12. March 15 Order at 10.

13. REV Comments, filed 4/8/16, at 10.

transactions are needed by Vermont utilities, GMP suggests that utilities should be encouraged to bank RECs towards RES compliance first by retiring such RECs, to the extent possible, with reserve transactions used only as needed.

VEC supports the March 15 Order and the banking provisions contained therein because VEC continues to argue that the Board does not have the authority to limit Tier I and II banking beyond the statutory three-year limit.

WEC supports the Board's approval of unlimited banking of RECs in Tiers I and II, up to the three-year expiration.

Mr. Weiss asks the Board to clarify that banked RECs cannot be sold later, after having been banked, either directly to another provider in Vermont or through the GIS.

### Discussion

REV argues that we erred in deciding that we do not have the authority to impose limitations on the banking of Tier I and II RECs. We disagree with REV's position.

We concluded in the March 15 Order that the language of Section 8004(c) is unambiguous because it requires the Board to permit the banking of RECs under certain parameters: "The only qualifying or limiting language on the number of RECs that can be banked is that the RECs must be 'in excess of' the amount needed for annual RES compliance 'in a given year,'" and "the statute does contain limiting language regarding the time during which a banked REC can be applied against a future compliance target. Banked RECs can be used for compliance purposes only 'in one of the following three years' after the REC was acquired."<sup>14</sup> We further found that "because Act 56 does not provide the Board with the requisite authority needed to limit the amount of RECs that can be banked in any given year, we do not adopt limitations on the banking of RECs beyond the three-year expiration provided for in the statute."<sup>15</sup> Thus, the statutory analysis contained in the March 15 Order interpreting the language of Section 8004(c) constitutes a reasoned exercise of our discretion that is faithful to both the language of the statute and the policy goals that it promotes.

---

14. March 15 Order at 10.

15. *Id.*

GMP observes that utilizing reserve transactions to bank RECs for future compliance will have the effect of removing these attributes from total calculations of the number of attributes in the New England system. While GMP recognizes the disadvantages associated with utilizing retirement transactions for purposes of banking RECs (for example, limiting retirements to a DU's load for a given time period), GMP suggests that DUs be encouraged to utilize retirement transactions to the extent these limitations do not apply. In the March 15 Order, we adopted the use of reserve transactions for banked RECs in large part because of the limitations that retirement transactions impose on DUs. To the extent these limitations are not present for a given DU, we conclude that allowing the use of retirement transactions to bank RECs is appropriate provided that those retirements are in excess of a DU's annual compliance obligation.

Turning to Mr. Weiss's request that the Board clarify that banked RECs may not be sold or otherwise exchanged after being banked, we find that, absent a clear mechanism for monitoring and tracking these RECs, such transactions would pose significant challenges for monitoring compliance with the RES. As no participants in this proceeding have proposed that the Board should adopt a mechanism for tracking transactions of banked RECs – and the system that the Board has adopted for monitoring banked RECs does not appear to readily enable us to do so – we conclude that allowing the sale of banked RECs would be inappropriate at this time.

#### **D. Disclosure of Generation Sources and Renewable Attributes**

Section 8006(b) provides that:

The Board shall ensure that all electricity provider and provider-affiliate disclosures and representations made with regard to a provider's portfolio are accurate and reasonably supported by objective data. Further, the Board shall ensure that providers disclose the types of generation used and shall clearly distinguish between energy or tradeable energy credits provided from renewable and nonrenewable energy sources and existing and new renewable energy.

#### Participant Comments

Discussion and comments on implementing this section centered around instituting a requirement for DUs to publicize three charts or graphs proposed by participants: (1) a chart detailing the generation portfolios, including fuel sources, held by DUs; (2) a chart detailing

those RECs and environmental attributes held for compliance by DUs; and (3) a chart detailing a DU's uses of power, including items such as customer deliveries, utility usage, and distribution losses.

BED recommends that DUs use all three charts. BED stresses the importance of utilities publicizing both their initial power portfolios and their final REC portfolios. BED also recommends the inclusion of a representation of the provider's uses of power in order to enable customers to better understand the relationship between the first two charts.

The Department supports the two-chart format supported by other participants but notes that although the third chart describing uses of energy may be useful and informative to customers, it may exceed what is required under the statute. The Department, therefore, recommends that publication of the third chart be voluntary. The Department similarly argues that the inclusion of emissions data and other environmental attributes, while potentially informative to some customers, should be voluntary. The Department stresses the importance of clearly labeling the initial-fuel-mix chart to clarify that it does not represent the environmental characteristics of the energy. The Department also argues that net-metering and other forms of generation not settled by the ISO New England, Inc. ("ISO-NE") should be included as a fuel source in the initial-fuel-mix chart. Finally, the Department recommends that the information be posted to a DU's website annually, with notice to customers of its availability.

GMP supports the proposal to demonstrate a DU's initial fuel mix and its approved RES compliance obligation. GMP recommends that these totals be compared to a DU's retail sales, while acknowledging that this will result in the loss of some detail related to certain sources and uses, such as net-metering or distribution losses. GMP agrees with the Department's recommendation regarding the manner of publicizing this information.

VEC supports requiring the publication of the two charts representing fuel mix and REC disposition, but proposes that additional information, such as the uses of power, be voluntary.

WEC generally supports the publication requirement but argues that the "design and appearance of this information should be left to each utility rather than being prescribed as a pie

chart and/or data table.”<sup>16</sup> WEC also argues that the representation of emissions data should be a voluntary disclosure. Finally, WEC recommends that providers should be left to determine the optimal method of delivering this information to its customers.

Mr. Weiss proposes an alternative table detailing a provider’s fuel mix, REC transactions, power consumption, and a range of other information. Mr. Weiss argues that the basic two-chart format proposed in this proceeding is a “scant minimum”<sup>17</sup> and that, instead, a more comprehensive depiction should be required. Mr. Weiss notes that much of this information will be required by the Board or Department in preparing various reporting obligations under the statute or determining a DU’s compliance with the RES. Mr. Weiss also argues in favor of including excess net-metering generation in a DU’s fuel mix, even though it may not count as a retail sale.

### Discussion

We recognize that DUs have a range of ways of communicating with their customers and that a particular form of communication may not be universally appropriate. However, we are also mindful of the statutory directive to ensure that DUs disclose their fuel mixes, including identifying the distinction between the renewable and non-renewable forms of energy. Accordingly, we have determined to specify a baseline standard for information that a DU must provide to its customers regarding its fuel mix and renewable power. This information shall be posted on a DU’s website, and, following an update of this information, a DU shall inform its customers of the release of updated information and how to access it by means of an annual mailing, e-mails, bill inserts or additions to the bill, or other forms of direct delivery (for example, an electric cooperative’s newsletter).

Turning to the specific information that such a communication must include, we find that it is appropriate for a DU to annually publish its initial mix of fuel sources and a description of its renewable claims after REC transactions. The description of fuel sources shall include all sources contributing more than 1% of a provider’s generation portfolio and shall detail the type

---

16. WEC May 6 Comments at 1.

17. May 6 Comments of Mr. Weiss at 2.

of generation used, as well as appropriate categories to represent smaller resources. Given customer interest in net-metering, we also conclude that the fuel mix representation should include generation from net-metering systems or other load reducers, even though this may reduce the direct comparability of the two charts. We also note that it is essential that the presentation of this component of a DU's portfolio description contain the disclaimer related to renewability proposed by the Department or a similar statement to clarify that this presentation does not constitute a DU's final disposition of environmental attributes.

A DU's representation of its renewable energy claims following REC transactions should be based on its most recently approved RES compliance filing. This information should also describe the fuel types associated with RECs or attributes held for compliance, represented as a percentage of retail sales. In addition, in order to distinguish between new and existing renewable energy as required by the statute, this publication should distinguish between Tier I and II RECs and should explain the distinction between these categories.

Participants in this proceeding predominately have proposed a pie graph method for disclosing the information discussed above. We do not, at this time, require a DU to use a pie graph to publicize this information, although we observe that this format is likely to be one that is readily comprehensible to the public. Depending on the utility, however, it may be appropriate to represent such information through a table or other format.

Turning to Mr. Weiss's proposed disclosures, we note that much of the information Mr. Weiss asks to have included will, by necessity, be reported in DU annual RES compliance filings. As such, it is not necessary to include this information as a minimum baseline for dissemination to all customers.

Finally, although not all participants specifically commented, there was general support among the participants for requiring a DU's representations regarding the renewability of its portfolio to be based on its approved RES compliance filings. This will ensure that these representations conform with Vermont law regarding what qualifies as a renewable resource and are based on objective data, as required by Section 8006(b). Accordingly, we direct DUs to base representations about the renewability of their energy portfolios on their most recently approved RES compliance filing.

**E. List of Qualified Facilities**

Pursuant to Section 8002(17), renewable energy eligible to qualify under the RES consists of “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.” In our March 15 Order, we directed participants in the working group meetings to develop a list of generation types that should be presumed to qualify as renewable under the RES. The Department filed an initial proposal of such resources on April 3<sup>rd</sup> on which participants based their comments.

Participant Comments

VPPSA proposes that the Department’s proposal be modified so that it allows hydroelectric plants that have restarted to be allowed to count fully towards Tier II of the RES if they have been dormant for at least 36 months prior to repowering.<sup>18</sup> VPPSA argues that financial and regulatory disincentives for the temporary shutdown of hydroelectric facilities, such as possible Federal Energy Regulatory Commission relicensing or penalties in the ISO-NE Forward Capacity Market, are a sufficient deterrent to keep a facility from shutting down for three years in order to claim Tier II eligibility at a later date.

The Department concurs with VPPSA’s recommendation that a defined period of dormancy is a better method to qualify redeveloped hydroelectric facilities for Tier II. However, the Department argues that VPPSA’s three-year limitation may be insufficient and instead proposes a five-year period of dormancy before a facility may qualify for Tier II.

GMP supports the Department’s initial methodology of calculating the Tier II eligibility of repowered hydro plants using a baseline of the plant’s production over the prior ten years. GMP notes, however, that because the amount by which production exceeds the baseline will vary from year to year, this will require an administrative step by the Board to assign an appropriate number of certificates to the Tier for which a plant is eligible. In addition, GMP

---

18. The Department’s initial proposal would have counted production from plants that have restarted operations after a period of dormancy towards Tier II to the extent their production exceeded the 10-year production average of the period ten years prior to June 30, 2015, which is the statutory cutoff for when a facility may be considered new renewable energy under 30 V.S.A. § 8002.

notes that a repowered hydroelectric facility must meet the time and capacity criteria for Tier II eligibility under the statute.

Mr. Weiss recommends that a natural increase in stream flow not count to qualify a hydroelectric facility as Tier II-eligible. Mr. Weiss also notes that eligibility of biodiesel-based generation should be based on the certified mix of biodiesel utilized in the final blend.

### Discussion

In general, we find that the proposed list of qualified types of generation offered by the Department is consistent with the statute, and we adopt it as a baseline for those resources that should be presumed to qualify for the RES program. However, we make several modifications to the Department's proposed list as discussed below.

The Department proposes the inclusion of biomass facilities as a facility type that may be presumed to meet the statutory definition of renewable and therefore qualify under Tier I or II of the RES. In its proposed list, the Department suggests that biomass facilities should demonstrate how they meet the statutory requirement of using a fuel source that is being consumed "at or below its natural regeneration rate." However, in follow-up comments, the Department suggests that any biomass facility registered in the GIS may be presumed to comply with the forestry requirements of its home state and therefore meet the statutory standard.

We are unprepared to accept the Department's proposal to include biomass as an automatically qualified generation type for Tier I of the RES at this time.<sup>19</sup> Although we recognize the Department's observation that harvests for these facilities can be expected to meet local forestry requirements, we have no basis to conclude that these requirements are intended to ensure that biomass is being harvested at or below its natural regeneration rate absent specific information about the harvesting practices used by such facilities. Accordingly, we are unable to conclude that a biomass facility should be presumed to qualify under Tier I of the RES. Instead, we direct biomass facilities seeking a statement of qualification to use the application process

---

19. To qualify under Tier II, a generation facility is required to comply with new harvesting standards to be published by the Vermont Department of Forests, Parks, and Recreation. Because these standards are required to ensure "long-term forest health and sustainability," we conclude that any facility using biomass harvested consistent with this standard will meet the statutory standard.



outlined below and include with their applications a demonstration that their fuel sources meet the statutory standard. In addition, we will convene further proceedings to examine the question of biomass eligibility for the RES, including consideration of whether the Board should adopt specific standards to ensure the sustainability of fuel harvested for biomass facilities seeking to qualify under Tier I.

We are also unprepared to conclude that generators using biofuels should automatically qualify for the RES due to questions about the actual fuel mix used. Accordingly, we direct generators using biofuels that wish to qualify under the RES to use the process for fuel sources that have not been presumed to qualify (outlined below).

Turning to the eligibility of dormant hydroelectric facilities for Tier II of the RES, we concur with VPPSA's and the Department's assessment that a period of dormancy may be easier to apply for purposes of determining the eligibility of redeveloped hydroelectric facilities. We are also mindful of the Department's observation that a three-year period may be insufficient, and so we adopt the Department's five-year dormancy requirement.

In reviewing the Department's list and based on our discussion above, we conclude that the following fuel types should be presumed to qualify under Tier I of the RES:

- 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.<sup>20</sup>

We also conclude that the following fuel sources should be presumed to qualify under Tier II of the RES, provided they meet the general requirements of that tier:

- Methane and flammable gases from food waste, agricultural waste, or other organic materials, or from decay of sewage or landfill wastes;

---

20. In addition, we will also consider the addition of biomass facilities to this list pending the outcome of the further proceedings described above.

- 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.

These facilities may utilize the simplified registration to obtain qualification as a Vermont RES facility for the applicable Tier. Consistent with the March 15 Order, we will also include the above facility types in a “batch” qualification of existing NEPOOL GIS resources to identify and qualify eligible resources already in the NEPOOL GIS.

Facilities using a fuel source not on the list of presumed fuel sources seeking to qualify for the RES should use an application process in which their claim to meet the statutory requirements may be examined. Facilities seeking qualification under this application process should provide a demonstration of why they meet the applicable statutory standards, and the Board may impose conditions on that qualification to ensure compliance with those standards.

#### **F. Aggregation Process for Net-Metered and Behind-the-Meter Generation**

In the March 15 Order, we directed participants to file further comments on the process for aggregating net-metered and behind-the-meter sources of generation so that they could be brought into the GIS. WEC filed a proposed process based on the one used by the Massachusetts Department of Energy Resources and a sample form for DUs to use in aggregating net-metering facilities for the GIS.

#### Participant Comments

WEC proposes that the Board adopt an aggregation process whereby a DU will develop a master list of its net-metering facilities that will be updated periodically by the DU. In the master list, a DU would list each net-metering facility whose production is being included in its aggregation, as well as key information about the system, owner, capacity, and other relevant

details. WEC suggests that the list be updated quarterly to correspond with the data upload schedule of the GIS.

The Department supports WEC's proposed methodology for aggregating the output of net-metered and behind-the-meter generators. However, the Department recommends that the sample master list proposed by WEC be amended to add two categories: the number of the Vermont certificate of public good ("CPG") and the customer's REC election.

### Discussion

WEC's proposed method of aggregating net-metered and behind-the-meter generators provides a workable mechanism for monitoring DUs' accounting of RECs from such facilities that is broadly consistent with regional practices regarding smaller generators. We recognize the value of including a Vermont CPG number in a utility's aggregation list of net-metered facilities; however, it is unclear that this list should include any facilities for which the owners have not elected to transfer RECs to the DU. Given that Section 8005(a)(2)(B)(ii) requires that DUs own and retire the RECs from net-metered facilities in order to be eligible for Tier II of the RES, there appears to be no basis for including facilities for which the DU does not own the associated RECs in a list intended to deliver this information into the NEPOOL GIS. Instead, we conclude that a DU, in submitting such a list, should certify that it owns the RECs associated with each listed system. Accordingly, we adopt the Department's recommendation that this list include the facility's Vermont CPG number but do not require that it also include a statement as to whether the RECs have been transferred to the DU, as such transfer should be the basis for all facilities appearing in the document.

In addition to the above modification, we note that it was not suggested that the master list contain a separate category specifying the type of generator. Given that a range of renewable generators can operate as net-metered facilities in Vermont, we conclude that it would be appropriate to include this information in a DU's aggregation report. Accordingly, we direct the DUs seeking to aggregate net-metered and behind-the-meter generation for import into the GIS to file a master list of all included facilities with the Board in a format consistent with WEC's proposal, subject to the modifications discussed herein.

#### **IV. DISCUSSION - TIER III**

##### **A. Conversion Methodology**

Pursuant to Section 8005(a)(3)(D):

For the purpose of determining eligibility and the application of the energy transformation project to a 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, in accordance with rules adopted by the Board. The conversion shall use 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.

In the March 15 Order, the Board adopted a conversion methodology to convert fossil-fuel savings into MWh of electric energy. We incorporate that methodology into this Order.

##### **B. Process for Prior Approval**

Pursuant to Section 8005(a)(3)(F)(ii), the Board must:

provide a process for prior approval of energy transformation projects by the Board or its designee. This process shall ensure that each of these projects meets the requirements of subdivision (3) and need not consist of individual review of each energy transformation project prior to implementation as long as the mechanism ensures those requirements are met. An energy transformation project that commenced prior to initial adoption of rules under this subdivision (F) may seek approval after such adoption.

The Board addressed this requirement in the March 15 Order, concluding that the Technical Advisory Group ("TAG") is the appropriate venue for the process of prior approval of energy transformation projects pursuant to this section. The Board recognized that VEIC, as a principal member of the TAG, would incur costs for participating in this process and adopted a mechanism for paying VEIC's costs.<sup>21</sup> However, in its April 8 comments, the Department requested that the Board reconsider its conclusion as to how VEIC's expenses should be reimbursed. Specifically, the Department recommended that, rather than require the Department to pay VEIC's expenses in full and collect funds from the DUs based on each DU's pro-rata

---

21. Order of 3/15/16 at 25-26.

share of annual retail sales, as the Board had ordered, VEIC should bill its expenses directly to the DUs based on a pro-rata share of annual sales. In the alternative, the Department recommended that the Board use its authority to allocate costs under 30 V.S.A. § 20.

Based on the Department's request, the Board asked that stakeholders comment on this topic in their May 6 comments.

### Participant Comments

The Department represents that there is stakeholder consensus that VEIC's expenses should be billed directly to each DU. The Department continues to support allocating such expenses on a pro-rata basis of annual retail sales. Stowe and WEC support this arrangement.

GMP supports establishing bilateral contracts between VEIC and each of the DUs. Further, GMP suggests that, rather than allocate VEIC's costs on a pro-rata basis of annual sales to each DU, as established in the Board's March 15 Order, costs should be allocated directly to the DU or DUs that are sponsoring the measure on an equal basis (for example, if two DUs sponsor a measure, they would each be allocated 50% of the measure-characterization costs). In the event that the Department sponsors a measure without any DU sponsorship, GMP recommends that the measure characterization costs be allocated equally to BED, GMP, Stowe, VEC, VPPSA, and WEC. GMP contends that this arrangement will create a collective incentive for the DUs to prioritize measure characterizations and minimize associated costs, and should accelerate the development of measure characterizations.

VEC states that it has no opinion as to the administrative method used to bill the DUs for VEIC's expenses. However, VEC continues to support allocation of such costs on a pro-rata basis of annual sales.

VEIC recommends that the Board amend the March 15 Order to allow it and the DUs to establish bilateral arrangements for billing and payment of its costs.

### Discussion

Based on participants' recommendations, we conclude that it is appropriate to modify our previous determination regarding the manner of payment of VEIC's costs for participating in the

TAG process for prior approval. The participants have identified a manner of billing and payment based on bilateral contracts between VEIC and the DUs that will allocate VEIC's costs to each DU based on each DU's pro-rata share of annual sales. This arrangement appears reasonable, and we hereby adopt it. This decision supersedes the Board's March 15 decision with respect to payment of VEIC's costs.

We do not adopt GMP's proposal for the allocation of costs. As discussed in the March 15 Order, all DUs may benefit from an energy transformation project's review for prior approval by the TAG. Because each DU's Tier III compliance obligation is proportional to its annual retail sales, we continue to hold that it is appropriate for the costs of the TAG process to be divided among the DUs based on their pro-rata share of annual retail sales.

### **C. Cost-Effectiveness Screening**

Pursuant to Section 8005(a)(3)(F)(iii), the Board is required to adopt rules for the cost-effectiveness screening of energy transformation projects. The screening is required to be consistent with the eligibility criteria under Section 8005(a)(3)(C) and, as applicable, the screening tests developed under 30 V.S.A. § 209(d) and 30 V.S.A. § 218c(a).

Section 8005(a)(3)(C) identifies the following eligibility criteria for energy transformation projects:

- (i) Implementation of the project shall have commenced on or after January 1, 2015.
- (ii) Over its life, the project shall result in a net reduction in fossil fuel consumed by the provider's customers and in the emission of greenhouse gases attributable to that consumption, whether or not the fuel is supplied by the provider.
- (iii) The project shall meet the need for its goods or services at the lowest present value life cycle cost, including environmental and economic costs. Evaluation of whether this subdivision (iii) is met shall include analysis of alternatives that do not increase electricity consumption.
- (iv) The project shall cost the utility less per MWH than the applicable alternative compliance payment rate.

### Participant Comments

With regard to cost-effectiveness screening, the Tier III Proposal, as modified by the Department, provided guidelines that a DU would follow when implementing energy transformation projects consistent with the requirements of Section 8005(a)(3)(F)(iii). For efficiency measures that may be offered through EEU programs, including those measures identified in the Technical Reference Manual (“TRM”), the Tier III Proposal recommends that an energy transformation project’s eligibility be determined initially using the existing statewide cost-effectiveness screening tool provided by the Department. For other energy transformation projects, the Tier III Proposal recommends that projects demonstrate a net reduction in fossil-fuel consumption and greenhouse gas emissions and meet the need for its goods or services at the lowest present-value life-cycle cost. For all energy transformation projects, including those identified as cost-effective through the screening tool, DUs would also need to demonstrate that each project costs less than the applicable alternative compliance payment (“ACP”)<sup>22</sup> rate, pursuant to Section 8005(a)(3)(C)(iv). Any cost/benefit analysis should include an examination of administrative and implementation costs.

The Tier III Proposal also recommends cost/benefit accounting at the program level. At the program level, DUs would present collectively the cost and benefits of all energy transformation projects for a given year. In addition, when possible, DUs would present cost and benefits of future-year programs for planning purposes.

BED, GMP, VPPSA, VEIC, and WEC generally support the Department’s proposal. With regard to cost-effectiveness screening, BED supports the inclusion of costs associated with administration, implementation, and marketing, and advocates for directly allocating such costs when possible in accordance with Governmental Accounting Standards. Stowe argues that an organization of its size may need to dedicate part of staff time to Tier III projects, and accounting for these employees’ time would amount to a significant administrative burden.

---

22. Section 8004(d) provides: “In lieu of purchasing renewable energy or tradeable renewable energy credits or supporting energy transformation projects to satisfy the requirements of this section and section 8005 of this title, a retail electricity provider in this State may pay to the Vermont Clean Energy Development Fund established under section 8015 of this title an alternative compliance payment at the applicable rate set forth in section 8005.”

VEIC supports the Department's recommendation that the accounting quantify the costs and benefits associated with increased electric sales and non-electrical income from energy transformation projects. VEIC contends that this accounting will help capture all value streams and costs that the DUs and other Energy Service Providers ("ESPs") may realize in implementing energy transformation projects.

With regard to cost/benefit accounting at the program level, BED recommends that projections of future-year programs be used solely for informational purposes and included in annual plans. BED contends that future costs are difficult to determine because forecasts are highly variable and dependent on a host of factors beyond a DU's control (e.g., customer participation and weather).

### Discussion

We accept the participants' recommendations with regard to cost-effectiveness screening of energy transformation projects. The recommendations represent a reasonable approach by using the existing statewide cost-effectiveness screening tool when applicable.<sup>23</sup> The approach recommended by parties is consistent with practices in the EEU program and consistent with the requirements pursuant to Section 8005(a)(3)(F)(iii). In addition, for all energy transformation projects, including those identified as cost-effective through the screening tool, DUs will need to demonstrate that each project costs less than the applicable ACP rate, pursuant to Section 8005(a)(3)(C)(iv). Any cost/benefit analysis should include an examination of administrative and implementation costs.

Further, we accept the recommendation that cost/benefit accounting occur at the program level. Reporting at the program level will inform and facilitate the planning and coordination of DU programs. Accordingly, annual plans shall include reporting on cost/benefit accounting at the program level, including future-year projections when possible.

---

23. The Board has long required energy efficiency providers over which it has jurisdiction to make decisions regarding which energy efficiency programs and measures to implement based on the societal cost-effectiveness test. *See* Docket 5270, Orders of 4/16/90 and 6/6/90; Docket 5980, Order of 9/30/99 at 58. The Department developed a cost-effectiveness screening tool based on decisions made by the Board in the context of electric and natural gas energy efficiency programs. The Board has required EEU's to use this screening tool since the EEU program's inception.



To ensure that cost-effectiveness screening is consistent with Section 8005(a)(3)(C)(iii), DUs must include in their annual plans for each energy transformation project that would increase electricity consumption a demonstration that it has analyzed alternatives that do not increase electricity consumption.

Finally, pursuant to Section 8005(a)(3)(C)(iv), an energy transformation project must cost the DU less per MWh than the applicable ACP rate. In the event that a DU relies on the ACP rate to meet any Tier III requirements, the DU shall demonstrate why the payment represents a cost-effective approach in its annual compliance filing.

#### **D. Banking and Trading of Tier III Savings**

Section 8005(a)(3)(F)(iv) provides that the Board shall adopt rules that:

allow a provider who has met its required amount under this subdivision (3) in a given year to apply excess net reduction in fossil fuel consumption, expressed as a MWh equivalent, from its energy transformation project or projects during that year toward the provider's required amount in a future year.

#### Participant Comments

The Tier III Proposal discusses banking in the following manner:

##### I. Banking and Trading of Tier III Resources

- 1) General Banking of Energy Transformation Project resources is unlimited, as articulated in 30 V.S.A. §8005(a)(3)(F)(vi). Trading of Tier III credits (i.e. 1 credit equals 1 MWh of Tier III savings) between Vermont ESPs [Energy Service Providers] should be allowed and implementation mechanisms should be explored.
- 2) Banking - Purpose. The Banking of Tier III resources should be unlimited. This provision enhances ability for distribution utilities to provide services at least cost to ratepayers, as it provides.
- 3) Trading - Purpose. Subject to Board approval, the allowance to trade Energy Transformation Project savings will allow for least cost planning by utilities, and has the potential to lower the overall cost of Tier III for all Vermont ratepayers.

On February 8, 2016, the Department provided stakeholders and the Board with a modified version of the Tier III Proposal with the Department's edits and recommendations

regarding Tier III banking. In the marked-up version of the Tier III Proposal, the Department states that banked Tier III allowances must first be verified, that Tier II allowances cannot be indefinitely banked for Tier III and remain subject to the three-year limitation discussed above, and that trading should only be explored as part of the 2020 Review.<sup>24</sup>

Assuming that Tier III project impacts can be verified and tracked, BED supports the concept of trading as a means to potentially foster increased levels of participation. However, BED disagrees with the suggestion that trading Tier III credits may be open to all ESPs. BED argues that a host utility is the only entity that can create a Tier III credit for sale to another distribution utility so long as the Tier III credit is derived from a project that consumes electricity within the host utility's service territory. BED bases this argument on several facts: (1) Tier III projects will result in additional wholesale power costs; (2) Tier III projects may affect the grid in ways that only the host DU can address; and (3) achieving the RES goal is a DU obligation.

The Department observes that the Tier III Proposal contained provisions for a system of trading energy transformation credits among ESPs. The Department disagrees with that provision for several reasons. First, the Department asserts that the Legislature did not envision Tier III trading when writing Act 56.

Second, the Department argues that the programmatic flexibility represented by Tier III trading could be met through various other provisions of the statute. For example, the Department notes that DUs have the ability to use tradeable Tier II-eligible RECs to meet their Tier III requirement; DUs can petition the Board for relief under Section 8005(a)(3)(G); and VPPSA member utilities can trade among themselves "behind the scenes" if they choose to file for compliance in the aggregate.

Third, the Department objects to the suggestion that all ESPs, not just obligated DUs, would be able to trade credits, even though the credits would not be verified until after they have been submitted to the Department by the DU for compliance.

Finally, the Department argues that it is better to wait to decide whether Tier III trading is necessary. If, after three years of implementation, it becomes clear that the benefits of trading

---

24. The 2020 Review is a check-in on the status of the RES that the Board will conduct in 2020. See Section IV-K of this Order for further details on the 2020 Review.

would outweigh the costs, then the Department argues that the 2020 Review is the proper venue to consider Tier III trading and plan for its implementation.

As an interim matter, until programmatic experience can be evaluated in the 2020 Review, the Department proposes that the Board establish a rebuttable presumption that a utility has made a good-faith effort to meet its Tier III obligation if it meets 90% or more of its annual obligation. The Department suggests that the remaining obligation would then be shifted to the following calendar year. A DU wishing to exercise greater flexibility in Tier III compliance could always file under subsection (G)(2), but having a standard “borrowing” provision would reduce administrative and legal costs for all involved.

In the alternative, if the Board rules that trading Tier III credits is allowed, the Department proposes that the Board adopt VPPSA’s proposal in which trading is allowed among DUs only after verification is complete.

GMP supports discussing the trading of Tier III RECs at the 2020 Review.

VEC supports the Tier III Proposal, with the changes made by the Department.

VEIC argues that DUs, EEs, and other ESPs should be able to trade Tier III credits. VEIC agrees that the statute is silent on Tier III trading but also argues that the Board could develop trading rules to foster partnerships among entities, a practice that is required by Section 8005(a)(3)(E). VEIC does not believe that a change in the statute is required to facilitate trading when two or more parties come to an agreement on a trade for Tier III resources and bring that proposal to the Board for its review and approval. VEIC refers to this practice as “retroactive partnering.”

VEIC contends that the DUs should not be allowed to transfer Tier II credits for Tier III compliance for an indefinite period. This protection would assure stakeholders that all RES credits are being put to present use and that Tier III credits are not being stockpiled from net-metering credits.

VEIC offered its support for the February 8, 2016, edits made by the Department to the Tier III Proposal banking section. VEIC states that the banking of energy transformation resources should only occur for verified savings.

VPPSA argues that Act 56 did not explicitly address the ability of utilities to trade Tier III credits, but that the Board should allow the practice in order to promote efficient and cost-effective program delivery.

VPPSA states that there is ambiguity built into the system around Tier III credits. Because targets are based on a year's retail sales, a target that effectively moves every year, and because utilities can use Tier II generation to satisfy their Tier III obligation, VPPSA contends that there will be uncertainty regarding the amount of savings that will need to be procured through Tier III. VPPSA argues that trading could be a valuable balancing mechanism to offset these uncertainties.

VPPSA asserts that in a situation in which a DU achieved more savings than expected from Tier III programs, the additional savings could be banked for up to three years. These banked credits could be used toward the DU's obligations, traded, or sold to other DUs that had fallen short of their goals. This would allow DUs to develop robust programs that accrue Tier III credits without the fear of losing the value of those credits.

VPPSA argues that Tier III credits may be banked indefinitely for future compliance but that this banking mechanism will not serve the same purpose as trading could. VPPSA argues that banking excess Tier III credits may increase short-term costs to the DU's ratepayers and could be more expensive on a net-present-value basis. VPPSA argues that trading Tier III credits could allow a DU to recover some of those first-year implementation costs within a year from when they were incurred and smooth out the cost impact of RES compliance. Moreover, VPPSA argues, trading could help mitigate "boom/bust" cycles in which a DU has excess savings in one year and the DU finds that it is no longer prudent to continue to bank long-term, which might create an incentive for the DU to stop offering the program, only to re-start it in later years. Furthermore, VPPSA argues, trading would allow DUs that were not able to meet their RES obligation through program implementation the possible option of complying at a cost lower than the ACP.

VPPSA observes that several parties recommend that the Board wait until the 2020 Review to evaluate whether and how to implement trading. VPPSA disagrees with waiting until 2020, arguing that the costs of starting up a new program are typically higher than ongoing

implementation costs and that the beginning of RES implementation is the most beneficial time during which DUs may engage in trading.

VPPSA disagrees with parties that assert that administering trading would be complicated. VPPSA maintains that DUs structure contracts as a part of regular business operations and could do so easily and transparently for Tier III savings.

## Discussion

### *Tier III Banking*

Act 56 contemplates that Tier I and II credits will expire after three years.<sup>25</sup> The statute contains no such expiration limit for Tier III credits, so they may be held for use by the DU until they are used for compliance. Additionally, Act 56 allows a DU, after it satisfies its Tier II requirement, to use excess Tier II credits to satisfy its Tier III requirement.<sup>26</sup> This raises a question: if a DU banks excess Tier II credits for application against its Tier III compliance target, does that transaction effectively make the Tier II credit not subject to expiration (like a Tier III credit)?

We find that Tier II credits are subject to the expiration limit of Section 8004(c) whether they are used to satisfy a Tier II obligation or a Tier III obligation. The Legislature clearly understood the difference between imposing an expiration limit on a credit and not imposing a limit, which is precisely what the Legislature did in Act 56 when it imposed a three-year limit on Tiers I and II credits and no limit on Tier III credits.

It is essential in our statutory construction that we do not render a statute ineffective through that construction.<sup>27</sup> Removing the expiration limit from Tier II credits would render ineffective the expiration language in Section 8004(c). Therefore, we find that Tier II credits are subject to the expiration limit of 30 V.S.A. § 8004(c) whether they are used to satisfy a Tier II obligation or a Tier III obligation.

---

25. See, 30 V.S.A. § 8004(c).

26. See, 30 V.S.A. § 8005(a)(3)(A).

27. *Audette v. Greer*, 134 Vt. 300, 302, 360 A.2d 66, 68 (1976)(where the Court found that it is essential that statutory construction not be such that it would render the act ineffective or lead to irrational consequences).

*Tier III Trading*

Some stakeholders have argued that the Board should adopt a scheme for trading Tier III savings credits immediately, while others have argued that the Board should delay any action on this topic until the 2020 Review. After reviewing the comments before us and the pertinent statutory language, we find that the statute does not contemplate the trading of Tier III savings credits.

Section 8005(a)(3)(A) provides, in part,

(A) Purpose; establishment. This subdivision establishes an energy transformation category for the RES. This category encourages Vermont retail electricity providers to support additional distributed renewable generation or to support other projects to reduce fossil fuel consumed *by their customers* and the emission of greenhouse gases attributable to that consumption (emphasis added).

We read this statutory language to require DUs to secure fossil-fuel savings for the customers in their own service territories. Allowing for the trading of Tier III savings credits would, in essence, allow a DU to reach Tier III compliance by using savings associated with the fossil-fuel savings accrued in another service territory. We find that this result would run counter to the legislative intent expressed in the clear language of Section 8005(a)(3)(A). Therefore, we will not approve a trading scheme for Tier III savings credits.

We agree with those commenters who point to Act 56 as the source of some of the flexibility that certain commenters seek through trading Tier III credits. For example, the Department noted that DUs have the ability to use tradeable Tier II-eligible RECs to meet their Tier III requirement; DUs can petition the Board for relief under Section 8005(a)(3)(G); and VPPSA member utilities can essentially trade among themselves if they choose to file for compliance in the aggregate. All of these tools provide flexibility independent of the Board's prohibition on Tier III credit trading.

Finally, we do not adopt the Department's recommendation that the Board introduce a rebuttable presumption that a DU has made a good-faith effort to meet its Tier III obligation if it meets 90% or more of its annual Tier III obligation. The participants in this process have not provided the Board with sufficient statutory grounds on which to determine that the Board has

the requisite authority to create such a rebuttable presumption. Absent such a showing, the Board refrains from adopting the Department's recommendation.

#### **E. Evaluation, Measurement, and Verification**

Pursuant to Section 8005(a)(3)(F)(v), the Board shall adopt rules to:

. . . ensure periodic evaluation of an energy transformation project's claimed fossil fuel reductions, avoided greenhouse gas emissions, conversion to MWH equivalent, cost-effectiveness and, if applicable, energy savings, and to ensure annual verification and auditing of a provider's claims regarding project completion and resulting MWH equivalent. Changes to project claims resulting from periodic evaluations shall not reduce retroactively claims made on behalf of a project approved under subdivision (3)(F)(ii) of this subsection (a) or reduce verified claims carried forward under subdivision (3)(F)(iv) of this subsection (a).

#### Participant Comments

The Tier III Proposal, as modified by the Department, recommends guidelines and timing for the evaluation, measurement, and verification of energy transformation projects.

BED, GMP, VPPSA, VEIC, WEC, and Stowe generally support the Department's proposal. VPPSA and Stowe did not support the Department's recommendation that documentation of an energy transformation project be subject to the same standards as those required of the EEUs for evaluation purposes. VPPSA and Stowe argue that EEU standards are not documented at this time and that DUs should not be required to adhere to standards that are unknown. VPPSA further argues that the Department's recommendation holds DUs to a standard that is neither consistent with treatment of EEUs nor appropriate, particularly for custom projects.

The Department also proposed that the Board extend by one month the July 1<sup>st</sup> reporting deadline for its recommendation to the Board regarding the EEUs' annual savings claims in order to allow time for the Tier III verification. The Department maintains that additional time and resources will be required for it to fulfill its role as evaluator of both EEU and energy transformation project savings claims because of the overlapping deadlines between the two programs, including the June 15 deadline to effect transactions of RECs in the GIS. In the

alternative, the Department states that if the EEU's are willing to commit to finalizing their savings-claims databases by early mid-February rather than the end of March, then this would also address the issues regarding timing.

VEIC argues that a one-month extension of the reporting deadline, as recommended by the Department, may negatively affect its planning process, delay its end-of-period performance award, and pose a significant burden on operations by delaying feedback on the progress made toward performance targets. VEIC maintains that a delay in the determination of any performance awards will decrease the value of the rewards and potentially increase the cost of capital to the EEU. VEIC recognizes that there are competing timelines and proposes that the Department work with the EEU's and the DUs to streamline certain aspects of the verification process.

### Discussion

We accept the Tier III Proposal, as modified by the Department, with regard to evaluation, measurement, and verification ("EM&V"), except for recommendations concerning reporting requirements and verification deadlines. These recommendations, with those two exceptions, represent a reasonable approach for EM&V that is consistent with EM&V practices in the EEU program and with the requirements of Section 8005(a)(3)(F)(v).

With regard to reporting requirements, we agree with VPPSA and Stowe that the EEU's currently do not have a documented standard or format for reporting savings claims. The *Process and Administration of an Energy Efficiency Utility Order of Appointment* ("P&A Document") requires that EEU's maintain in their files documentation of all assumptions and calculations used to establish their savings claims but establishes no documentation or format standard.<sup>28</sup> Accordingly, for purposes of establishing EM&V reporting requirements for DUs, we adopt the same requirements found in the P&A Document.

The Department further recommends that reporting standards be developed under the TAG process. We encourage the Department, the DUs, and the EEU's to work together through

---

28. The Board approved the most recent version of the P&A Document in Docket 8455, Order of 2/12/16. The P&A Document sets forth the procedural and administrative framework for EEU Orders of Appointment.



the TAG process to develop uniform reporting standards to facilitate the annual verification process.

With regard to the proposal to extend by one month the deadline for the Department to file its recommendation regarding EEUs' savings claims, we do not accept the Department's recommendation. We are concerned that any delays to the EEU verification process will affect the planning process and the achievement of performance goals.<sup>29</sup> Accordingly, we are adopting a modified timeline for the reporting and verification of energy transformation projects to facilitate the Department's verification process. We are requiring that savings claims by the distribution utilities be filed by March 15 of each year and that the Department provide a recommendation by June 1 of each year.<sup>30</sup>

Further, we recognize the resource constraints that the verification process places on the Department given the overlaps between the RES and EEU programs. We encourage the DUs and the EEUs to provide their savings-claims documentation to the Department in advance of the established deadlines when possible.

#### **F. Equitable Opportunity**

Pursuant to Section 8005(a)(3)(F)(vi), the Board must create rules:

To ensure that all ratepayers have an equitable opportunity to participate in, and benefit from, energy transformation projects regardless of rate class, income level, or provider service territory.

The participants' comments addressing this section focus on several discrete issues that we address separately, below.

---

29. Further, the reporting and verification deadlines are found in the EEUs' Orders of Appointment and would require separate proceedings, with opportunities for hearing, to make any changes to the deadlines.

30. We have shifted these dates earlier from those initially proposed by the Department to ensure that there is sufficient time for DUs to conduct transactions in the NEPOOL GIS following receipt of the Department's recommendation.

*Income-Level Equity*Participant Comments

The participants agree that in addressing how to interpret the term “income level,” the Board should focus on ensuring that low-income customers are provided an opportunity to participate in and benefit from energy transformation projects, and the Board should not focus on establishing rules that pertain to other income strata. Further, the participants agree that the Board should not require the DUs to track the income levels of all participants.

A number of participants made recommendations as to how “low-income customer” should be defined and how that definition should be applied for the purposes of the RES.

BED recommends that “low income,” for the purposes of providing equitable opportunity, should be identical to the definition that is applicable to its energy services division. BED contends that a different definition would cause customer, agency, and contractor confusion.

GMP notes that it has a specific low-income rate class and that it intends to track equitable opportunity based on its low-income rate class. However, GMP supports the rebuttable presumptions that have been proposed for use by other DUs.

The Department recognizes that the appropriate definition of “low income” may vary across the state and between service territories and may even differ between DU programs and low-income weatherization programs. However, the Department contends that GMP’s proposal to use its low-income rate program as its definition of low-income is inappropriate because it is too restrictive. The Department notes that only a small portion of the low-income population in GMP’s service territory is now participating in GMP’s low-income, opt-in rate and that there are “tens of thousands” of low-income GMP customers who have not enrolled in the program. The Department states that it does not object to using the same income-eligibility requirement for both the low-income rate program and the RES equitable opportunity requirement.

Stowe contends that a statewide definition of “low income” may be inconsistent with the demographics within a specific DU service territory. Therefore, Stowe recommends that DUs be allowed to petition the Board for a different definition of “low income” in order to be consistent with their ratepayer demographics. Similarly, Stowe recommends that the assumed percentage of

“low income” ratepayers within a specific service territory may need to change if such a petition is granted by the Board.

VEIC supports the adoption of a standard definition of “low income” that would be applicable to both EEUs and DUs. VEIC recommends the U.S. Housing and Urban Development (“HUD”) definition, which defines low-income status by Census Tract and includes all households that have median income levels that are at or below 80% of Area Median Income.

WEC supports using an existing statewide (or adjusted for county) determination of household income (such as that used by the Vermont Fuel Assistance Program) so that no DU would require separate income determination.

### Discussion

We agree that it would not be appropriate to require the DUs to track the income levels of all program participants and find that such a requirement could even create a barrier to participation. Rather, we conclude that the obligation to provide equitable opportunity to all income levels will be fulfilled by providing equitable opportunities to participate in energy transformation projects to both “low income” and “non-low income” customers. DUs shall be required to track and report on “low income” customer participation in their programs.

Participants have recommended several different definitions of “low income” customers to be used in this program, including:

- Households where the gross household income is equal to or less than 185% of the federal poverty level based on household size (Vermont Fuel Assistance Program);
- Households where the household income is at or below 80% of Vermont median household income (Statewide EEU; VPPSA proposal);
- Households where the median income level is at or below 80% of Area Median Income (HUD);
- Households where the gross household income is at or below 150% of the federal poverty level (GMP); and
- Households where the household income is at or below 80% of median income, by county and household size. However, if a member of a household receives fuel assistance, the household is eligible to receive weatherization services (Weatherization).

For the purposes of providing equitable opportunities to low-income customers to participate in and benefit from energy transformation projects, we conclude that DUs should assess eligibility based upon a definition that is consistent with the statewide EEU: Low-income households are those where the household income is at or below 80% of Vermont statewide median household income. We conclude that this definition will provide consistency in the market because it is the same definition that is applied to Efficiency Vermont and recognizes that many of Vermont's customers are served by DUs whose service territories span more than one county. However, we recognize that certain DUs may face unique demographic situations where the use of this statewide definition would be unduly burdensome or would not result in equitable outcomes. Therefore, we find it appropriate to allow a DU to petition the Board to be allowed to use a different definition of "low income" based on the unique circumstances of that DU and its customers.

In assessing whether a DU has provided to its low-income customers an equitable opportunity to participate in and benefit from energy transformation projects, we conclude that it is appropriate to establish a rebuttable presumption that the percentage of low-income households in each DU's service territory is the statewide percentage of low-income households. We request that the Department provide this figure to the DUs on an annual basis, with input from the Vermont Department for Children and Families or other sources as appropriate, so that the DUs may plan and track their energy transformation offerings appropriately. As with our determination above that DUs should be afforded the opportunity to petition the Board for a different definition of "low income," we conclude that a DU shall be allowed to petition the Board for a different percentage of low-income households in its service territory based on the unique circumstances of that DU and its customers.

### *Service Territory Equity, Standard Suite*

#### Participant Comments

CLF recommends that all customers have the same access to energy transformation project opportunities, regardless of their DU service territory. CLF maintains that equity across geographic boundaries is a hallmark and great success of the statewide EEU in Vermont. Thus,

CLF supports equal opportunity to participate in Tier III programs as a default. In order to implement Tier III equitably, CLF supports the establishment of a suite of pre-approved measures “combined with DU reporting that demonstrates why customer access to a particular energy savings project or program is not suitable for a particular DU’s customers.”

The Department maintains that “equitable opportunity” does not mean “exactly the same” because DUs may meet their Tier III obligations through any mix of additional distributed renewable energy generation or energy transformation projects.

GMP believes that the Board should not interpret “equitable opportunity” to mean equitable results. Rather, GMP submits that equitable opportunity means that DU customers must be given the choice to select from a common set of statewide technologies, regardless of their service territory. Further, GMP makes the distinction that equitable opportunity must be achieved at the project level, rather than the program level. Therefore, GMP argues that equitable opportunity across service territories may be established simply by offering the same energy transformation projects or technologies. GMP suggests by way of example that if every DU offers cold-climate heat pumps and weatherization measures, the requirement for equitable opportunity would be met. GMP maintains that program design and delivery of common projects and measures should be left to the discretion of each DU. GMP contends that the DUs are under no statutory requirement to offer the same incentives or terms for their programs, and that this is a good thing as the DUs stand to learn from each other over the course of the RES program.

To establish which measures should be offered on a statewide basis, GMP recommends that the Board adopt a rule that would require the DUs to survey their customers annually to gauge the level of interest in specific energy transformation projects. Based on the results of those surveys, which would be included in DU annual plans, the DUs would collectively analyze the results and include projects that meet customer interest.

VPPSA contends that the term “equitable opportunity” should not be interpreted as requiring DUs to offer the same Tier III programs. Rather, VPPSA argues that it is statutorily clear that each DU should be enabled to offer unique energy transformation projects aimed at reducing fossil-fuel consumption. VPPSA maintains that the ability of DUs to try different

things and learn from experiences will enable Vermont to take advantage of emerging technologies and to learn from the experiences of multiple DU programs. Furthermore, VPPSA notes that the different service territories may have different housing stock or fuel choices, so certain project offerings may not be justified in some service territories.

To minimize lost opportunities when fossil-fuel equipment comes to the end of its useful life, and to ensure equitable opportunities for all ratepayers, VEIC recommends the adoption of a statewide standard suite of prescriptive measures that would be made available to all customers across the state. VEIC contends that this approach, if provided by Efficiency Vermont, would build on the economies of scale and existing infrastructure of the statewide EEU, and would keep incremental prices lower than what stand-alone energy transformation programs might otherwise have cost. VEIC suggests that the standard suite program could be paid for pro-rata by the DUs or on an individual-DU basis for measures deployed within a specific service territory. VEIC states that it would negotiate the terms, measures, and costs of a standard suite with the DUs and the Department.

VEIC cautions that the approach suggested by some participants — to offer programs to one sector of customers in one year, and another sector in another year — would confuse and frustrate the market because not all customers would be able to participate at a given time regardless of service territory.

The Department maintains that the creation of a standard suite of programs and measures, as recommended by VEIC, may be an efficient and effective way for the DUs and EEUs to cost-effectively meet their obligations where such programs and measures overlap. However, the Department argues that participation in the standard suite should not be mandatory for the DUs, as DUs may opt to meet their Tier III obligations using RECs and through programmatic innovation.

NEGPA and Green Mountain Geothermal support the standard suite concept, provided that it includes biofuels, biomass heating, high-efficiency heating systems, and air-source or geothermal heat pumps.

GMP supports the creation of a statewide standard suite of measures and programs. However, GMP recommends that participation should be optional and that contributions-in-kind should be recognized as one option to negotiate shared savings between DUs and EEU's.

Stowe does not believe that a standard suite of energy transformation projects should be a requirement. Rather, Stowe contends that DUs should have flexibility in program design. Should the Board make the standard suite a requirement, Stowe recommends that it be paid for by the DUs on an individual basis for the measures deployed within a service territory rather than on a pro-rata basis. Further, Stowe suggests that the notion of a statewide standard suite of energy transformation projects may be an appropriate topic for the proposed 2020 Review.

VEC recommends that the Board encourage, but not require, the development of a standard suite of technologies that would be available on a statewide basis.

VPPSA supports the concept of a statewide standard suite of programs on a voluntary basis, but objects to the standard suite being a requirement. VPPSA contends that if the Legislature had intended to have a uniform set of program offerings available statewide, it would have placed the RES requirement on a statewide entity rather than on the DUs. VPPSA states that there are differing characteristics across DU service territories that should be recognized in program offerings.

WEC supports analyzing a standard suite of Tier III measures, but does not believe it should be mandatory. Rather, WEC believes that DUs should maintain sufficient flexibility in program design and implementation to suit their customers.

### Discussion

We find that the statute does not require that each DU energy transformation program be the same, or that customer outcomes be the same, to ensure that equitable opportunities are provided to ratepayers regardless of service territory. Rather, we conclude that preserving the opportunity for DUs to develop unique and innovative projects and programs will benefit Vermont ratepayers and will enable DUs to tailor programs to their customer bases. However, within this flexible approach, we require DUs and their partners to provide customers with consistent, transparent, and unbiased information about energy transformation projects, such as

up-front costs, benefits, long-term maintenance, options available to overcome first-cost barriers, and other efficiency and energy support services available, when those projects are offered in more than one service territory.

To ensure that all ratepayers have an equitable opportunity to participate in, and benefit from, energy transformation projects regardless of their provider service territory, we conclude that all DUs should offer energy transformation projects to all customer sectors (e.g., residential and commercial/industrial) in each compliance year, unless a DU meets its Tier III obligation exclusively through additional distributed generation. We conclude that if all customers have an opportunity to participate in energy transformation projects in any given year, regardless of service territory, and if consistent information is being provided statewide about those projects, then this statutory requirement will be met. If DUs were not required to make energy transformation opportunities available to all customer sectors at all times, market disruption, frustration, and confusion would likely result, rather than market transformation.

With respect to the proposal to create a standard suite of energy transformation projects or measures that would be available on a statewide basis, we find that this may be a useful, efficient, and cost-effective approach to provide equitable opportunities across service territories, much the same as Efficiency Vermont provides electric and thermal-energy-and-process-fuels efficiency services on a statewide basis. A standard suite approach could provide economies of scale in delivering energy transformation projects, and could take advantage of existing infrastructure. However, Section 8005 does not require a homogenous statewide approach to energy transformation projects. Therefore, we do not require that a statewide standard suite of energy transformation projects be developed, nor do we require that DUs participate in such a standard suite if one is developed. Instead, we encourage DUs and their partners to consider this alternative as they plan their program offerings.

With respect to GMP's proposal that DUs offer a common set of statewide technologies based on an annual survey of customer interest in specific energy transformation projects, we find that this could be a viable, equitable, and efficient manner to establish equitable opportunities across provider service territories. However, as with the standard suite concept, we



do not adopt GMP's proposal as a requirement. Rather, we encourage DUs and their partners to consider this alternative as they plan their program offerings.

### *Rate Class Equity, Compliance Period*

#### Participant Comments

The Department contends that when a DU chooses to meet its obligation through additional distributed generation, those projects will be acquired for the benefit of all ratepayers, thus automatically achieving equity regardless of rate class or income level. When a DU chooses to meet its obligations through energy transformation projects, the Department maintains that DUs should provide the same equitable opportunity to all ratepayers regardless of customer class.

The Department recommends that DUs track program participation, spending, and benefits by sector: residential, commercial/industrial, and low-income. In addition, the Department recommends that DUs maintain the capacity to deliver energy transformation projects to all sectors and income levels each year of the RES program, not over the term of the RES program as suggested by others. The Department suggests that a DU can always partner with the existing EEU and low-income weatherization programs, which, when combined, would enable a DU to offer programs to all sectors and income levels. The Department contends that maintaining capacity in this manner would not be onerous for a provider and would serve the goal of providing consistency and equity over the term of the RES program. In order to allow for programmatic flexibility, the Department states that a requirement that DUs have the capacity to serve each sector and income level within a rolling three-year window would be acceptable.

GMP believes that the costs and benefits of energy transformation programs should accrue in "rough proportion" to each rate class, and should be measured over the course of the RES program.

Stowe argues that requiring DUs to offer energy transformation projects to each class of ratepayer during each year of the RES program would be overly burdensome on the DUs and may require DUs to offer a program to a customer class that has very limited anticipated uptake. Instead, Stowe suggests that measurement of equitable opportunity over the term of the RES program would provide DUs with flexibility in how they design, promote, and implement energy

transformation programs to achieve the required levels of savings consistent with statutory requirements. Stowe agrees that DUs should make energy transformation projects available to all customer classes and income levels during the term of the RES program.

With respect to the concept of energy transformation project benefits accruing to customers in rough proportion to rate-class revenues, Stowe recommends that DUs be allowed to petition for different measurement criteria based on their specific service territories' customer needs.

VEIC agrees that providing "rate class" equity should be measured by customer sector (e.g., residential and commercial/industrial customers).

VPPSA recommends that the evaluation of equitable opportunity is appropriately considered over the term of the RES program, rather than on an annual cycle. VPPSA asserts that there is no statutory requirement to demonstrate equitable opportunity on an annual basis, and that such a requirement would lead to less efficient program implementation as DUs spread limited resources across multiple programs to serve different customer sectors. VPPSA argues that demonstrating equitable opportunity over the term of the RES program is more in line with the tradition of energy efficiency program delivery in Vermont, which is measured over the long term, and notes that energy transformation does not occur on an annual cycle. To this end, VPPSA recommends that DUs should not be required to offer a program to each type of customer in each year, as such a requirement could increase costs and limit the transformation projects offered to customers.

### Discussion

To ensure that equitable opportunities are provided to all ratepayers regardless of customer class, we agree that this should be measured by customer type or sector, rather than by rate class. This solution recognizes that DUs may have several different rate classes within each of the residential, commercial, and industrial sectors. Therefore, we require DUs to track participation, costs, and benefits by customer sector (e.g., residential and commercial/industrial).

Because all customer classes are likely to pay for a DU's energy transformation projects and programs in their rates, we conclude that the costs and benefits of energy transformation

programs should accrue in “rough proportion” to these sectors’ annual retail sales. Recognizing that markets and opportunities change over time, and that certain projects may require longer lead times and may take longer to conclude than others, we determine that this requirement should be measured over the term of the RES program, rather than annually. Given the unique circumstances and market potential in each DU, the DUs shall be enabled to petition the Board for alternative measurement criteria based on the unique circumstances of the DUs and their customers.

However, we conclude that it would be inequitable, and would frustrate and confuse the market, if energy transformation opportunities were not offered to all customer classes in each program year. While we recognize the misgivings that certain DUs may have about this approach, we conclude that this requirement is consistent with the statutory intent and will most readily achieve market transformation, reduce use of fossil fuels, and avoid greenhouse gas emissions for all customer sectors. Further, DUs may always partner with an existing EEU, weatherization agency, or other energy service provider to maintain this capacity. Thus, we conclude that this requirement will not be overly burdensome.

#### **G. Partnership and Collaboration**

Pursuant to 30 V.S.A. § 8005(a)(3)(F)(vii), in implementing the RES program the Board must:

[e]nsure the coordinated delivery of energy transformation projects with the delivery of similar services, including low-income weatherization programs, entities that fund and support affordable housing, energy efficiency programs delivered under section 209 of this title, and other energy efficiency programs delivered locally or regionally within the State.

In addition, 30 V.S.A. § 8005(a)(3)(E)(i) provides that:

A retail electricity provider or a provider’s partner may oversee an energy transformation project under this subdivision (3). However, the provider shall deliver the project’s goods or services in partnership with persons other than the provider unless exclusive delivery through the provider is more cost-effective than delivery by another person or there is no person other than the provider with the expertise or capability to deliver the goods or services.

Participants' comments on this subject area focused on a range of distinct issues, which we address individually below.

### *Tier III Proposal*

The Tier III Proposal, as modified by the Department, addresses the subject of collaboration and coordination among DUs, EEU, the Department, and other ESPs in the following manner:

- 1) Purpose – Pursuant to 30 V.S.A. §8005(a)(3)(F)(vii), the Board shall adopt rules to ensure the coordinated delivery of energy transformation projects with the delivery of similar services.
  - a. To assure customers that Energy Transformation and Energy Efficiency measures, projects, and programs can be accessed through comprehensive or complementary offerings.
  - b. To assure ratepayers that Energy Transformation and Energy Efficiency measures, projects and programs are not offering duplicate incentives for similar measures and, similarly, that savings are not being accounted for more than once.
- 2) General – Value of Coordination and Collaboration.
  - a. Achieve common understanding of Energy Transformation Program plans and objectives between ESPs.
  - b. Provide customers with integrated Energy Transformation and Energy Efficiency Programs through comprehensive offerings.
  - c. Ensure efficient utilization of existing DU, EEU, and ESP resources (e.g. program delivery platforms, trained energy support staff, capital infrastructure, and account managers), as well as those resources developed in the future.
- 3) Shared Responsibilities of DUs and EEUs.
  - a. Throughout project implementation, and not limited to publishing the Annual Plan, sharing knowledge of incentives, marketing and implementation strategy will take place among DUs, EEUs, and DPS.
  - b. When EEU and DU projects overlap due to similar measures, projects or programs, the providers will work together to negotiate reasonable allocations of savings and costs to be included in the Annual Plans and accounted for in the Annual Compliance Reports for Board review. Should providers be unable to reach a consensus, the Board shall retain continuing jurisdiction to resolve all such matters. The DPS will be

available to assist providers in the mediation of any dispute prior to Board involvement.

- c. Agreements between EEU's and DUs to share resources across a DU service territory may be an efficient utilization of staff and resources, and may result in single-point of contact services for some Energy Transformation and Energy Efficiency Programs.
- d. Customers considering Energy Transformation projects should be advised of:
  - i. Upfront costs, benefits, and long term maintenance requirements for customer-appropriate technologies (e.g. weatherization, biomass, CCHP, etc.)
  - ii. Options available to overcome first cost barriers to participation
  - iii. Other efficiency and energy support services available, and referrals for additional information or special services (e.g., Weatherization Assistance Providers, DU, EEU, LIHEAP, etc.).<sup>31</sup>

In addition, this document defines an ESP as “[a] business or company who is engaged in the planning and/or implementation of an Energy Transformation Project or Program. ESPs include, but are not limited to, DUs, EEU's, Weatherization Agencies, and their partner organizations.”<sup>32</sup>

In general, this aspect of the Tier III Proposal appears to be supported by participants in this proceeding, with most commenters either not addressing this aspect or offering minor modifications.

In its comments, VEIC proposes that the definition of ESPs be modified to include those entities that are engaged in “an activity or activities that could qualify as” an energy transformation project.<sup>33</sup>

The Department objects to VEIC’s proposal to expand the definition of ESP, expressing concern that such a modification would burden DUs with outreach to an impractical number of potential partners, including, for example, all fuel dealers within a DU’s service territory.

---

31. *Department’s Proposed Modifications to Energy Transformation Project Tier - DU & EEU Straw Proposal and Discussions Draft*, filed 4/8/16 at 4-5 (slightly modified for clarity).

32. *Department’s Proposed Modifications to Energy Transformation Project Tier - DU & EEU Straw Proposal and Discussions Draft*, filed 4/8/16 at 2 (slightly modified for clarity).

33. VEIC May 6 Comments at 4.

BED stresses the importance of the consistent and accurate delivery of information to consumers regarding Tier III measures. Specifically, BED is concerned that some DUs may provide different levels of information to their customers on similar energy transformation projects, leading to customer confusion.

### Discussion

We find that the structure of the Tier III Proposal, as modified by the Department and quoted above, will be an effective mechanism to ensure that DUs collaborate with other ESPs in the implementation of Tier III programs. Accordingly, we will adopt this portion of the Tier III Proposal, with minor modifications, as a basis for our order implementing the RES.

Turning to VEIC's proposed modifications of the definition of ESP and the Department's comments in response, we observe that the statute requires that energy transformation projects be coordinated with the delivery of "similar services." Given the context of the statute, which goes on to list weatherization agencies, the EEUs, affordable housing agencies, and other energy efficiency programs as a set of similar services, it is clear that the statute refers to organizations conducting efficiency programs rather than individuals or entities actually providing energy services. Thus, we conclude that the statutory language of Section 8005(a)(3)(F)(vii) requires a DU to coordinate its Tier III activities with those organizations with similar or overlapping programs but not necessarily with every possible contractor who may actually perform the work required to implement an energy transformation measure.<sup>34</sup>

Finally, we note BED's concern related to the marketing of energy transformation projects and customer confusion. We observe that the Tier III Proposal contains language directing DUs to inform customers of the "[u]pfront costs, benefits, and long term maintenance requirements" for those technologies.<sup>35</sup> We note that this requirement is a critical component of ensuring the coordinated delivery of energy transformation projects with other energy services in

---

34. We note, however, that this does not relieve a DU of its obligation to implement energy transformation projects with a partner unless it is shown that exclusive delivery by the DU is more cost-effective.

35. Department's modifications to the Proposal at 5.

order to preclude the scenario that BED describes, and we adopt it as an element of our implementation order.

### *Additional Regulatory Incentives for Partnership*

#### Participant Comments

In its April 8 comments, VEIC proposes that the Board provide some form of regulatory relief, such as a streamlined pre-approval mechanism, for DUs that partner with Efficiency Vermont in the deployment of their Tier III programs. Alternately, VEIC proposes that the Board consider setting performance-based financial incentives to reward DUs that utilize a partnership structure with another regulated entity to reduce “the societal cost of complying with the statute.”<sup>36</sup> VEIC argues that such partnerships should be formalized through a written agreement between the partners and should specify the scope of work to be provided by each partner and the savings attributable to each partner’s contributions.

The Department argues that the obligation for DUs to partner with other organizations to implement Tier III is already a clear requirement of the statute and that the Board need not provide additional clarification of the statutory obligation. The Department also notes that, regardless of a formal Board decision to further incentivize partnerships, many of the benefits of partnership proposed by VEIC will accrue to DUs through the statute’s mechanisms for prior approval and through engagement with processes and programs that are already subject to regulatory review. In addition, the Department questions how a financial incentive, as proposed by VEIC, would be structured and what source of funds would be used to deliver such an incentive.

BED stresses the importance of coordination among DUs, energy efficiency providers, and other ESPs not only within a host utility’s service territory but across service territories. In particular, BED argues that measures that are offered across multiple DU service territories must

---

36. VEIC April 8 Comments at 3.

“coordinate the delivery of accurate, objective information” and ensure the delivery of integrated programs.<sup>37</sup>

WEC expresses support for VEIC’s proposal to allow limited regulatory relief for DUs that partner with Efficiency Vermont in implementing Tier III measures. WEC specifically points to the Board’s decision in Docket 7307 granting certain regulatory relief for utility investments in advanced metering infrastructure as a model that the Board should consider.<sup>38</sup>

### Discussion

We find it is unnecessary at this time to adopt additional regulatory incentives to encourage DUs to collaborate with other ESPs. The requirement that DUs coordinate their programs with ESPs and develop programs in partnership with outside entities is a fundamental obligation of the statute and should not require additional incentives for DUs to fulfill. We also note the Department’s observation that many of the benefits proposed by proponents of additional regulatory incentives will already accrue to DUs that partner with the EEU through programs that are already subject to evaluation, measurement, and verification processes and that receive Board approval in other settings. As a result, we conclude that there is no basis to adopt additional incentives for activities that would benefit DUs anyway and are generally required under the statute.

## **H. Best Practices and Minimum Standards**

Pursuant to Section 8005(a)(3)(F)(viii), the Board shall adopt rules:

[t]o ensure that, if an energy transformation project will increase the use of electric energy, the project incorporates best practices for demand management, uses technologies appropriate for Vermont, and encourages the installation of the technologies in buildings that meet minimum energy performance standards.

---

37. BED April 8 Comments (Tier III) at 4.

38. See, *Investigation into Utilities’ Use of Smart Metering*, Docket 7307, Order of 11/16/09.



### Participant Comments

The Department's modifications to the Tier III Proposal recommend guidelines for DUs to follow when implementing energy transformation projects that increase the use of electric energy. The modified proposal includes several activities that a DU may undertake to ensure that measures that increase electric energy use are installed in a responsible and cost-effective manner for customers and that the energy consumed by those measures can be directly attributable to fossil-fuel reduction elsewhere in the customers' total energy portfolios.

With regard to best practices for demand management, the Department proposes that if a participating customer is enrolled in the most advanced available "smart rate"<sup>39</sup> program, then that customer's energy transformation project can be presumed to employ best practices. The Department recommends that other best practices might include verifying a high level of building performance (e.g., an efficient envelope that minimizes heat pump use at all hours) and non-monetary behavioral programs (e.g., encouraging winter heat pump use to avoid peak days or hours). In addition to these options, the Department recommends that a DU could identify other options for best practices in its annual plans.

Participants generally support the Tier III Proposal as modified by the Department, with some exceptions. VEIC supports the use of advanced rates, but questions whether these rates are widespread enough to constitute a required best practice. VEIC recommends that the guidelines allow an energy transformation project if advanced rate programs are not available in a DU's service territory. Stowe also argues that advanced rates should not be a requirement for a project that increases the use of electric energy to be eligible as an energy transformation project.

As a matter of practice, BED and WEC support requiring a customer to meet minimum building performance standards before installing an energy transformation project that increases the use of electric energy. GMP and Stowe maintain that minimum standards should not be a requirement. Rather, encouragement may take a range of forms, including providing customer information, energy audits, and incentives. BPPA, GMP, Stowe, VEIC, VPPSA, and WEC support the concept of tiered incentives as a mechanism for encouraging appropriate

---

39. "Smart rates" or advanced rates may include such strategies as critical peak pricing, time-of-use rates, or controllable load rates or riders.

weatherization in conjunction with energy transformation projects that increase electric energy use.

BPPA and VEIC support having the annual plans contain strategies for encouraging weatherization and building performance standards. BED, BPPA, GMP, Stowe, VEIC, and WEC recommend that the TAG process be used for establishing minimum performance standards for buildings where energy transformation projects will increase electric energy consumption.

With regard to outreach and education, BED, BPPA, and WEC recommend the coordination of marketing to deliver uniform and consistent statewide messaging regarding thermal measures such as weatherization and heat pumps. BED also recommends that existing statewide resources be maximized, including the Thermal Energy and Process Fuels (“TEPF”) Clearinghouse and the Efficiency Excellence Network. Additionally, VEIC proposes an informational campaign that could include education about electric vehicles and their contribution to load management.

With regard to marketing, BED, BPPA, NEGPA, and Green Mountain Geothermal maintain that ESPs, including DUs, should be required to present potential Tier III savings accurately in their marketing materials or website. BED argues that marketing information that is presented to customers must be accurate, reflect current fuel prices, and address conditions that are customer specific. For example, BED contends that characterizations of potential savings from cold-climate heat pumps can be misleading if the derived savings are not evaluated using a customer’s specific fuel source.

### Discussion

We accept the Tier III Proposal, as modified by the Department, for this section with some clarifications regarding best practices, minimum standards, and customer education and marketing. The recommendation represents a reasonable approach for implementing best practices and minimum performance standards consistent with Section 8005(a)(3)(F)(viii).

Section 8005(a)(3)(F)(viii) requires that if an energy transformation project will increase the use of electric energy, the project must incorporate best practices for demand management.

The Department has recommended several options for best practices, including ensuring that participating customers are enrolled in an appropriate advanced rate. We agree that these options may demonstrate best practices for demand management, but we clarify that a DU may employ other options that represent best practices. In order to ensure that a DU is using best practices, we require that annual plans include descriptions of best practices for demand management that will be employed by the DU when implementing energy transformation projects that will increase electric energy consumption.

Section 8005(a)(3)(F)(viii) also requires the DUs to “encourage” the installation of such technologies in buildings that meet minimum energy performance standards. While we accept the participants’ recommendations that building performance standards be developed as part of the TAG process, we do not require that an energy transformation project be sited in a building meeting minimum energy standards in light of the specific statutory language directing that this practice simply be “encouraged.” Consistent with Section 8005(a)(3)(F)(viii), we require DUs to demonstrate in their annual plans how they will encourage the installation of energy transformation projects that increase the use of electric energy in buildings that meet minimum energy performance standards.

All participants support customer outreach and education, including some coordination of marketing to deliver uniform and consistent statewide messaging. We encourage the DUs, the EEUs, and the Department to deliver uniform and consistent statewide messaging when possible. This messaging should aim to maximize existing resources such as the TEPF Clearinghouse and Efficiency Excellence Network. Accordingly, we require that annual plans include strategies for customer education, outreach, and marketing.

#### **I. Process for Termination or Withdrawal of Energy Transformation Projects**

Section 8005(a)(3)(F)(ix) requires the Board to adopt rules:

[t]o provide a process under which a provider may withdraw from or terminate, in an orderly manner, an ongoing energy transformation project that no longer meets the eligibility criteria because of one or more factors beyond the control of the project and the provider.

### Participant Comments

The parties did not comment directly on how the Board should address this issue. Rather, VEIC, the Department, and WEC (the only parties that specifically commented) put forward comments through the Tier III Proposal and proposed edits thereto.

Under the Tier III Proposal, VEIC proposes that DUs may withdraw or terminate an energy transformation project or program with written notice to the Department, Board, and any affected program partners.

The Department adds that the notice must be filed at least 30 days prior to termination of a program. WEC also supports the concept in the Tier III Proposal but recommends that, instead of 30-day notice, the DU should be required to provide notice to “any particularly affected customers.”

### Discussion

As the statute recognizes, it may be appropriate for a DU to discontinue an energy transformation project that no longer meets the eligibility requirements in the statute, our orders, or Board rules. If a DU concludes that an energy transformation project or program should be withdrawn, it shall provide notice to the Board, the Department, any customers participating in a energy transformation who may be affected by the withdrawal, any affected program partners, and any person who has applied to participate in the project or program to be withdrawn. Consistent with the Department’s recommendation, we find that this notice shall be filed at least 30 days in advance of project or program termination.

#### **J. Tier III Annual Planning**

The Tier III Proposal recommends that DUs file an annual plan that would be “an informational document that is filed prospectively with the Board to describe how a DU plans to fulfill its obligations under 30 V.S.A. § 8005(a)(3).” According to the Tier III Proposal, the purpose of annual plans is to: (1) allow the Board and stakeholders to understand the decision-making framework of DUs as it relates to RES implementation strategies; (2) facilitate transparency in DU strategies for compliance, which would allow for stakeholder involvement to

improve implementation efforts by better coordinating between state partners and allow for robust planning by all state- or ratepayer-funded entities; and (3) facilitate collaboration between DUs and the Department with regard to evaluation, measurement, and verification activities.

### Participant Comments

BED contends that Board approval of Tier III annual plans is not necessary. BED recommends that if the benefits and costs of energy transformation projects are to be included in annual plans, such forecasts should be used for informational purposes only. With respect to the timing of annual plans, BED suggests that they be filed in conjunction with Board Rule 5.200 annual reporting.

CLF suggests that DUs should document how they are coordinating with EEUs and maintains that Board approval of these plans should not be required, at least in the beginning.

The Department maintains that the annual plans need not be approved by the Board.

GMP supports the Department's comments on the Tier III Proposal related to annual planning. GMP states that the annual plan would explain how a DU plans to fulfill all of the Tier III requirements before the compliance year begins.

VPPSA does not believe it would be valuable to include in annual plans the ways in which all ratepayers will have equitable opportunities to participate in and benefit from energy transformation projects regardless of rate class or income level.

Stowe believes that it is crucial for annual plans to be informational in nature and allow sufficient flexibility to tailor programs in order to adjust to customer uptake, new technologies, and other factors that may affect program success.

VEC supports the Tier III Proposal as originally submitted. VEC supports submitting an annual plan in November, prior to the compliance year. VEC believes that the annual plans should be informational and does not believe annual plans should be approved by the Board.

VEIC believes that annual plans are needed and should be filed with the Board before the implementation period begins. VEIC agrees that Board approval of annual plans is not necessary, especially when annual plans are composed of programs and projects that are being implemented in partnership with Efficiency Vermont. VEIC largely supports the Department's

revisions to the Tier III Proposal as it relates to annual plan requirements. VEIC believes that a DU should include considerations such as weatherization and building performance standards in its annual plan if it plans to offer heat pumps as part of its Tier III program.

VPPSA recognizes the value that will be provided by Tier III annual plans and supports such a requirement, provided that the annual plans are expected to be short, high-level descriptions and are not subject to Board approval.

WEC contends that Board approval of annual plans is unnecessary and supports filing annual plans as part of Rule 5.200 annual resource plans.

### Discussion

The statute does not require the DUs to file Tier III annual plans. Nonetheless, we agree that Tier III annual plans may help facilitate transparency in DUs' strategies for compliance, allow for planning by state- and ratepayer-funded entities, and promote collaboration among the DUs, EEU's, the Department, weatherization agencies, and other ESPs. Accordingly, we require DUs to file Tier III annual plans.

The Department provided a revised draft of the Tier III Proposal as Attachment B to its comments filed May 6, 2016 (which the Department called "Tier 3 Guidance"). Section D of the document addresses annual planning. We conclude that many of the provisions of Section D are reasonable and hereby adopt them. Specifically, we conclude that DU Tier III annual plans shall include at least the following information: (1) a description of the estimated Tier III compliance obligation for the following compliance year and (2) a description of the overall strategy to be implemented to meet the Tier III compliance obligation in the following compliance year (including the use of any banked Tier III credits, the use of any excess Tier II credits, and the implementation of any energy transformation projects).

When a DU's strategy includes the implementation of energy transformation projects, then its annual plan shall include: (1) a description of the types of energy transformation projects that will be undertaken (e.g., 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; (2) a description of any energy transformation

project collaborative efforts; (3) when a DU plans to implement an energy transformation project exclusively, an explanation pursuant to Section 8005(a)(3)(E)(i) of why the delivery by the DU is more cost-effective than delivery by another person or that there is no person other than the provider with the expertise or capability to deliver the goods or services; (4) a description pursuant to Section 8005(a)(3)(F)(vi) of how all ratepayers will have an equitable opportunity to participate in and benefit from energy transformation projects regardless of rate class or income level; (5) when a DU plans to implement energy transformation projects that are likely to increase electricity consumption, a description pursuant to Section 8005(a)(3)(F)(viii) of the estimated electric impact of such measures, the demand-management best practices that will be incorporated, how the technologies are appropriate for Vermont, and how the installation of the technologies in buildings that meet minimum energy performance standards will be encouraged. When so-called “electrification” energy transformation projects are planned, the Tier III annual plan must demonstrate how the DU analyzed such projects to see if there are least-cost alternatives that do not increase electricity consumption, as required by Section 8005(a)(3)(C)(iii). If a DU plans to share services between partners, the Tier III annual plan must describe the methodology for allocating project costs and savings.

The Tier III Proposal offers three different ways for DUs to submit Tier III annual plans: (1) a separate filing that would be filed by the November 1 immediately prior to the start of the compliance year; (2) a filing made in coordination with an annual compliance report or as part of the DU’s report made pursuant to Board Rule 5.200, if filed by November 1; or (3) a filing submitted within a DU’s integrated resource plan. We find that filing Tier III annual plans separate from any other DU compliance document will be the most transparent and administratively efficient means of filing. Therefore, we conclude that Tier III annual plans must be filed as stand-alone documents by the November 1 immediately prior to the start of the compliance year and should not be incorporated into Board Rule 5.200 annual reports or integrated resource plans.

Based on participants’ comments, we conclude that Tier III annual plans submitted by DUs should be subject to Board review and stakeholder comment but need not be explicitly

approved by the Board. We anticipate that stakeholders will be afforded an opportunity to file written comments on Tier III annual plans, followed by a workshop if necessary or requested.

Recognizing that energy transformation projects or programs may arise that are not included in Tier III annual plans, we conclude that it is appropriate for DUs to pursue measures, projects, and programs not included in their annual plans, provided that the DU notifies the Board, the Department, and any program partners 30 days prior to implementation. A DU must provide the same information that would be required in an annual plan and may request an estimate from the Department of any additional evaluation, measurement, and verification costs.

#### **K. 2020 Review**

A number of parties recommend that the Board establish a formal review process for the RES in 2020 (the “2020 Review”). As expressed in the Tier III Proposal, the participants recognize that the concept of energy transformation embodied in Tier III is new and that there is a need to examine whether the approach set out in this Order is meeting the statutory objectives and the State’s energy policies.

Under the Tier III Proposal, the 2020 Review would include a review of: (1) costs and benefits of the program; (2) rate impacts of Tier III; (3) income and rate class equity; (4) the annual planning process; (5) cost-effectiveness screening mechanisms; (6) market impacts of the program, including customer satisfaction or confusion with the delivery of the program; (7) impacts on other State programs or services; and (8) other areas deemed appropriate.

#### Participant Comments

VEIC supports the concept of the 2020 Review to assess the first three years of the implementation of energy transformation projects and to examine whether implementation is meeting the RES program’s strategic goals and legislative intent. VEIC recommends that, at the present time, the Board place no limitations on the 2020 Review and instead investigate any relevant implementation questions. CLF’s comments are similar, supporting the 2020 Review with no limitations as to the scope.



VPPSA proposes that to initiate the 2020 Review, the Department complete a draft report by April 1, 2020, and final report by August 1, 2020, which would form the basis for an analysis of the success of Tier III.

VEC supports VPPSA's proposal. However, VEC cautions that, while the report might be beneficial, it should "only be a starting point from which the Board should conduct an appraisal of how well the program framework and rules adopted by the Board have resulted in societally beneficial results."

The Department also supports the adoption of the 2020 Review structure from the Tier III Proposal. However, the Department opposes the VPPSA proposal that the Department prepare a report at the outset of the 2020 Review. The Department states that it already has statutory reporting obligations under Section 8005b, which will touch on many of the same issues that would likely be considered in the 2020 Review. Thus, the Department recommends that, in lieu of a separate report, stakeholders examine the Section 8005b(b)(1) reports filed in 2018 and 2019 and provide recommendations to the Department on ways to structure the 2020 report to the Legislature to inform the 2020 Review process.

WEC largely supports the Tier III Proposal. However, WEC proposes that the review also include the consideration of possible statutory changes to improve the RES program. WEC also seeks clarification that the 2020 Review will examine all electric ratepayer benefits.

### Discussion

The Board agrees with the proposal of various participants that we conduct a review of Tier III after three years of implementation (in 2020). As the participants have recognized, the statutory mandates associated with energy transformation projects and the implementation measures that we adopt in this Order (and will embody in rules) reflect some new concepts. The process of defining how best to implement the statute has taken nearly a year, with many discussions on the best approach to achieve the Legislature's directives. As the participants take steps to meet their Tier III obligations by offering energy transformation projects, we may discover adjustments that need to be made to the program. The 2020 Review would provide a

mechanism for such changes. It would also enable a broader assessment of the overall effectiveness of the program, as implemented.

In terms of the scope of the 2020 Review, the specific items in the Tier III Proposal appear to reflect a reasonable framework for the review. However, we agree with VEIC and CLF that we should not now place limits on our review or even attempt to define what will be assessed. For some of the same reasons that a review after three years is reasonable — that we do not know how program implementation will evolve and whether the rulings we set out in this order might need adjustment — we cannot foresee the issues that should be assessed in 2020.

We have decided not to adopt VPPSA’s proposal that the Department prepare a report that will form the starting point for the 2020 Review. As the Department commented, it already has ongoing obligations to report to the Legislature. In light of these mandates, we do not find it reasonable to add yet another report. Instead, we agree with the Department’s recommendation to use the reports that the Legislature has already required. Participants will have the benefit of seeing the Department’s 2018 and 2019 reports and can identify other issues that the Department should analyze in subsequent reports.

**L. Use of Tier II RECs for Tier III Compliance by 100% Renewable Providers**

Section 8005(a)(3)(A) provides that a DU may “satisfy the energy transformation requirement through distributed renewable generation in addition to the generation used to satisfy subdivision (a)(2) of this section or energy transformation projects or a combination of such generation and projects.” In addition, Section 8005(b) provides, in relevant part, as follows:

(b) Reduced amounts; providers; 100 percent renewable.

(1) The provisions of this subsection shall apply to a retail electricity provider that:

(A) as of January 1, 2015, was entitled, through contract, ownership of energy produced by its own generation plants, or both, to an amount of renewable energy equal to or more than 100 percent of its anticipated total retail electric sales in 2017, regardless of whether the provider owned the environmental attributes of that renewable energy; and

- (B) annually each July 1 commencing in 2018, owns and has retired tradeable renewable energy credits monitored and traded on the New England Generation Information System or otherwise approved by the Board equivalent to 100 percent of the provider's total retail sales of electricity for the previous calendar year.
- (2) A provider meeting the requirements of subdivision (1) of this subsection may:
- (A) satisfy the distributed renewable generation requirement of this section by accepting net metering systems within its service territory pursuant to the provisions of this title that govern net metering; and
  - (B) if the Board has appointed the provider as an energy efficiency entity under subsection 209(d) of this title, propose to the Board to reduce the energy transformation requirement that would otherwise apply to the provider under this section.

### Participant Comments

In its April 8 comments, WEC requests that the Board clarify that a provider meeting the requirements of Section 8005(b)(1) may count all Tier II-eligible RECs owned by the provider towards compliance with its Tier III obligation.<sup>40</sup>

The Department argues that a provider qualifying under Section 8005(b)(1) should only be allowed to count Tier II RECs towards its Tier III obligation to the extent that those Tier II RECs exceed what the provider's Tier II compliance obligation otherwise would have been absent the language of Section 8005(b). In support of this argument, the Department asserts that: (1) the statute requires that a provider operating under Section 8005(b)(2)(A) retire RECs associated with its net-metering systems; (2) allowing qualified providers to use any Tier II RECs held by the provider for Tier III compliance would frustrate the statutory objectives of promoting the development of both renewable energy and energy transformation projects, in part because it

---

40. In Docket 8714, the Board is currently considering a petition from WEC for a determination that it qualifies as a 100% renewable provider under Section 8005(b)(1).

would largely eliminate that provider's Tier III obligation; and (3) this interpretation is consistent with the State's broader policy goals of supporting the development of alternatives to fossil-fuel-based energy.

### Discussion

Section 8005(b) provides for a modified RES requirement for DUs that meet certain conditions. To qualify, a DU must first demonstrate that, as of January 1, 2015, it owned an amount of renewable energy in excess of its expected retail sales in 2017. Following that demonstration, the DU must demonstrate that it owns and has retired RECs in excess of its retail sales each year. For a DU that meets this standard, the statute provides that it may meet its Tier II obligation by accepting new net-metering systems within its service territory.

Separately, Section 8005(a)(3)(A) provides that a DU may utilize renewable generation eligible for Tier II to satisfy its Tier III obligations. However, this section specifically requires that such generation must be "in addition" to that used by a DU in meeting its obligations under Tier II. In other words, this generation may not be "double-counted" for both Tiers.

WEC asks us to find that, in light of the modified Tier II requirement provided under Section 8005(b)(2)(A), it may count any Tier II-eligible RECs that it possesses for application towards Tier III. We conclude that this proposal is inconsistent with the statute. Section 8005(b) clearly does not exempt a qualified DU from its Tier II obligations; it provides an alternative path to meeting them. That alternative path requires that a DU accept net-metering systems consistent with the statutory framework governing net-metering. Thus, under the statute, a qualified DU must use all new net-metering to meet its Tier II obligation. To count generation from these systems towards a qualified DU's Tier III obligation would fail to give meaning to the requirement that generation used for Tier III be in addition to that used to meet Tier II, and would constitute impermissible double-counting. Accordingly, we find that a DU qualifying under Section 8005(b)(1) and using the modified Tier II requirement under Section 8005(b)(2)(A) may not count RECs associated with new net-metering systems accepted during the term of the RES program towards Tier III.

We also conclude that, in order to count Tier II-eligible generation towards Tier III, this generation must be in excess of the generation used to establish a DU as eligible for the modified requirement under Section 8005(b). Section 8005(b) does not state that a qualified DU no longer possesses a Tier III obligation. In fact, it provides for an alternative mechanism to reduce a provider's Tier III obligation under certain circumstances. However, we find that allowing a DU to count generation used to demonstrate its eligibility under Section 8005(b)(1) would, in effect, create such an exemption where none was intended. Any DU that qualifies for the modified requirement is likely to possess a meaningful portfolio of generation eligible for Tier II. Allowing such generation to count towards Tier III is likely to eliminate, or at least substantially reduce, a DU's Tier III obligation. As we find that this was not the intent of the statute – had it been, there would have been no need to include the additional mechanism reducing Tier III requirements – we conclude that a qualified DU seeking to apply generation from Tier II-eligible units must also show that this generation was in excess of that used to meet its ongoing obligation to demonstrate its ownership of RECs or renewable attributes under Section 8005(b)(1).

## **V. DISCUSSION - ALL TIERS**

### **A. Schedule for Compliance Filings**

The RES establishes annual compliance obligations for DUs commencing January 1, 2017. In order to assess DU compliance with the RES, it is necessary for the Board to adopt a series of compliance filings in which DUs demonstrate that they have procured the required amounts of renewable energy or fossil-fuel savings from energy transformation projects.

#### **Participant Comments**

In its comments filed on December 4, 2015, the Department proposed a process and schedule for filings in which DUs would demonstrate their compliance with the RES program. The Department observes that the GIS closes its accounting for the prior calendar year on June 15. In addition, the Department notes that, because Tier II RECs may be utilized for compliance in Tier III, it is necessary for the compliance schedule for these Tiers to align. Accordingly, the

Department proposes a schedule in which the Department would complete the verification of DU energy transformation projects prior to when the GIS accounts close<sup>41</sup> and DUs would make an overall compliance filing for all three Tiers by August 31, followed by a Board compliance determination by December 15.

Other participants generally were supportive of the compliance schedule proposed by the Department or did not specifically comment on it.

Following the April 14 workshop, participants were asked to comment on the timeline for submission of the ACP following a Board determination as to a DU's compliance with the RES. GMP maintains that a single universal date to assess the ACP is not necessary. Instead, GMP states that the Board can, in assessing the ACP, direct payment within 60 days of the assessment. The Department proposes that such payments be made within 30 days of a Board order directing the payment of an ACP. Other parties did not specifically address this issue.

### Discussion

We conclude that the compliance schedule proposed by the Department is reasonable and will allow the DUs to demonstrate their compliance with the RES in an efficient manner. Accordingly, we adopt it.

Turning to the question of the timing of payment of the ACP, we adopt the Department's and GMP's recommendation that the payment be due within a certain time period following the Board's determination of RES compliance. We further conclude that 30 days, as recommended by the Department, is a sufficient timetable for a DU to make payment of the ACP and is consistent with the Board's practice in other instances where the Board has assessed a penalty upon a utility.<sup>42</sup>

---

41. Additional discussion of the timeline for Department verification of energy transformation projects is discussed under Section IV-E, above.

42. See, e.g., Docket 8328, *Investigation into Alleged Violation by Vermont Gas Systems*, Order of 7/31/15 at 23.

**B. Alternative Compliance Rates**

Section 8005(a)(4)(B) requires the Board to adjust the ACP rate for inflation annually commencing January 1, 2018.<sup>43</sup> The statute directs the Board to use the consumer price index, which is defined as “the Consumer Price Index for all urban consumers, designated as ‘CPI-U,’ in the northeast region, as published by the U.S. Department of Labor, Bureau of Labor Statistics.”<sup>44</sup>

For the purposes of the RES Program, the Board will announce the applicable ACP inflation adjustor annually on September 1 to take effect the following January 1.

**C. Adoption of March 15 Order**

In the March 15 Order, the Board reached several conclusions regarding the implementation of the RES. Except as modified above, we adopt those conclusions as a basis for our Order here.

**VI. CONCLUSION**

The participants in this proceeding have expended many hours in working group meetings, workshops, and the development of written comments. They are to be commended for the constructive and collaborative approach they have taken to inform the implementation of this program. Based on those discussions and comments, we adopt this Order implementing the RES and direct DUs to comply with the RES in the manner outlined in this Order.

---

43. Pursuant to Section 8005(a)(4), the starting ACP rate for Tier I is \$0.01/kWh, and, for Tiers II and III is \$0.06/kWh.

44. 30 V.S.A. ¶ 8002(3). The CPI-U in the northeast region can be found at [http://www.bls.gov/regions/mid-atlantic/news-release/consumerpriceindex\\_northeast.htm](http://www.bls.gov/regions/mid-atlantic/news-release/consumerpriceindex_northeast.htm).

## VII. ORDER

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

### Tiers I & II

1. **Use of GIS.** Pursuant to 30 V.S.A. § 8006(a), the Board adopts the Generation Information System operated by the New England Power Pool (“GIS”) as its principal mechanism for the tracking and monitoring of renewable energy credits (“RECs”) qualifying for the Renewable Energy Standard program (“RES”).

- (a) Distribution utilities (“DUs”) shall demonstrate their compliance with Tiers I and II of the RES through ownership and retirement of renewable energy credits (“RECs”) in the GIS.
- (b) Should a DU wish to demonstrate its compliance with the RES by means of environmental attributes that are not monitored on the GIS, the DU shall submit with its annual RES compliance filing documentation demonstrating that it owns the attributes in question, that the attributes are eligible for the RES, and that the attributes have not been claimed in any other jurisdiction.
- (c) In the case of energy procured from Hydro-Quebec or the New York Power Authority (“NYPA”), DUs may demonstrate their compliance with the RES through the mechanism described in 1(b), above. However, in this instance, DUs shall also demonstrate their ownership of the attributes associated with energy from Hydro-Quebec or NYPA through ownership and retirement of those attributes as they are tracked within GIS, even if the DU claims a different value for the environmental attributes than that displayed in the GIS.

2. **Banking of RECs.** Pursuant to 30 V.S.A. § 8004(c), DUs may retain RECs or attributes eligible for the RES for compliance with the RES in the following three years.

- (a) DUs seeking to retain RECs for future compliance shall either place RECs that they wish to bank into a reserve account within the GIS or shall retire RECs in excess of



their compliance obligation. DUs shall include documentation in their annual compliance filings demonstrating their retirement of RECs or their placement into a reserve account.

- (b) In their annual compliance filings, DUs shall include documentation detailing their use and retention of banked RECs. This document shall be provided in the form of a spreadsheet approved by the Board after comments from the Department of Public Service (“Department”) and shall contain the following information:
- (i) The number of RECs or attributes a DU is banking in the current year.
  - (ii) The number of RECs or attributes a DU is using from its bank of RECs in the current year.
  - (iii) The number of RECs a DU is retaining in its bank for compliance in future years.
  - (iv) For each of the above, the year the RECs or attributes were created.

**3. Qualification of Generation Facilities.** Generators seeking to be qualified and eligible for the RES shall submit a qualification registration or application to the Board pursuant to this paragraph. In the event the Board approves a request for qualification, the Clerk of the Board shall provide a statement of qualification to the entity requesting the qualification and to the GIS administrator.

- (a) **Registration Process.** Generators utilizing the following fuel sources may receive a statement of qualification by means of the registration process described below. For Tier I, the registration process shall be available to 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. For Tier II, facilities that use the following fuel types and have a system capacity of less than 5 MW (AC) and that are directly connected to the subtransmission or distribution system of a DU may seek qualification under the registration process: 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 (“ANR”) after January 1, 1987, or from the Low Impact Hydropower Institute; marine thermal or hydrokinetic; photovoltaic solar; concentrated solar power; and wind.

- (i) Facilities seeking a statement of qualification through registration shall submit a registration form provided by the Board, which shall contain the following information: GIS identification number; plant capacity of the facility; date of construction; DU system with which the facility is interconnected; the fuel source of the facility; RES Tier for which qualification is requested; and any other information required in the instructions to that form.
  - (ii) Copies of the registration form shall be submitted to the Clerk of the Board and to the Department. The Department shall have 15 days from the filing of the form to file any objection to the issuance of a statement of qualification to the requesting facility. Unless the Department files an objection to the qualification of the facility or unless the Board, on its own motion, opens an investigation into the same, the facility will be deemed to be qualified on the 16<sup>th</sup> day and the Clerk of the Board shall issue a statement of qualification.
- (b) Application process. For a facility seeking qualification for the RES not described in Paragraph 3(a)(i), above, the facility shall submit an application requesting a statement of qualification.
- (i) The application shall be filed on a form prescribed by the Board and shall include all of the information listed in Paragraph 3(a)(i), above, along with any additional information required by the instructions to that form.
  - (ii) A copy of the application shall be filed with the Board, the Department, and ANR.

- (iii) The Department and ANR shall have 30 days to submit any comments on the application, including recommending whether the Board should conduct further proceedings to determine whether the facility should receive a statement of qualifications.
    - (iv) Following the 30-day comment period described above, the Board may issue a determination that the facility should receive a statement of qualification or may open an investigation to determine whether such a statement should be issued.
- (c) Aggregated Facilities. DUs may seek to aggregate the output of a group of eligible facilities as a single qualified facility for purposes of monitoring and reporting the output of those facilities to the GIS.
  - (i) A DU wishing to aggregate the output of a group of eligible facilities pursuant to this subparagraph shall submit an application to the Board requesting a statement of qualification for its aggregated facilities pursuant to the process described in Paragraph 3(b) above.
  - (ii) With its application for the qualification of a group of aggregated facilities, the DU shall submit a list of all facilities it seeks to include in its aggregation. This list shall include the following information: name of the individual or entity owning the generation facility; address of the facility's location; information related to the facility's equipment, including, as applicable, manufacturer, number of units or modules and the number and size of system inverters; system capacity; fuel source of the facility; date of commercial operation; and Vermont certificate of public good number. In its review of an application for qualification of a group of aggregated facilities, the Board may impose conditions related to the metering and monitoring of the output of the aggregated facilities, as appropriate.
  - (iii) Following Board issuance of a statement of qualification for a group of aggregated facilities, the DU shall submit, for Board approval, an update

including any modifications to its list of aggregated facilities at the beginning of each quarter.

- (iv) The Board or Department may audit the accuracy of information reported to the GIS by a DU under this subparagraph and may require the production of any records, documents, or relevant materials necessary to examine such accuracy.
- (d) **Review of Qualified Facilities.** Upon reasonable notice, the Board and the Department may audit a qualified facility or group of qualifying facilities, including the inspection and copying of records, inspection of facilities, and other actions necessary to determine compliance with the RES. Upon notice and opportunity for hearing, the Board may revoke a statement of qualification for a facility or group of facilities if it finds that a facility's qualification is inconsistent with the requirements of the RES or with the information submitted in the facility's registration or application form.

**4. Disclosures and Representations Regarding DU Generation Portfolios.** Pursuant to 30 V.S.A. § 8006(b), DUs shall base any representations of their generation portfolio on their most recently approved RES compliance filings. In addition, DUs shall publish on their websites a representation of their portfolio mixes, which shall include:

- (a) A representation of all sources contributing more than 1% of a DU's generation portfolio, including a description of the fuel sources. In accounting for sources in its generation portfolio, a DU shall include generation from net-metered facilities.
- (b) Appropriate categories to represent sources that do not individually exceed 1% of the generation portfolio.
- (c) A representation of the DU's renewable energy portfolio following all REC transactions as approved by the Board in the DU's most recent RES compliance filing.
- (d) DUs annually shall provide notice to their customers of the availability of the above information by means of a bill insert, direct mailing, e-mail, or other form of direct

notice. This notice shall be provided within 90 days following the approval of a DU's annual RES compliance filing.

### **Tier III**

5. **Conversion Method.** 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 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.

- (a) The Department will provide and maintain a publicly available spreadsheet to determine the MWh-equivalent energy values. The Department will update the spreadsheet on an annual basis with the appropriate U.S. Energy Information Administration values.
- (b) 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.

6. **Process for Prior Approval.** Pursuant to Section 8005(a)(3)(F)(ii), a process for prior approval of energy transformation projects is hereby adopted.

- (a) The Vermont Technical Advisory Group ("TAG") shall administer the process for prior approval of prescriptive energy transformation projects. The TAG shall ensure that each of the prescriptive energy transformation projects that it analyzes meets the requirements of Section 8005(a)(3). The TAG shall file with the Board, by no later than January 31 of each year, a list of prescriptive energy transformation projects that it reviewed during the previous calendar year. The TAG shall include appropriate information documenting the eligibility determinations that it has made for each project.

- (b) VEIC may seek to recover its costs for participating in the TAG process as it relates to energy transformation projects. VEIC shall allocate such costs to each obligated DU based on the DU's pro-rata share of annual retail electric sales in Vermont. VEIC may enter into bilateral arrangements with obligated DUs as a manner of recovering such costs.
- (c) DUs may submit potential prescriptive energy transformation projects directly to the TAG for review, characterization, and prior approval. For those potential energy transformation projects that are not immediately sponsored in the TAG by a DU, a project proponent may present its project to the Department for an initial review. If the Department concludes that the project may be viable as an energy transformation project, the Department may share its review and conclusions with the DUs, who may determine whether to pursue full evaluation of the project through the TAG. The Department may also sponsor a potential project for TAG review itself.
- (d) A DU may petition the Board for an alternative process for prior approval of custom projects and for prescriptive projects in lieu of obtaining prior approval of an energy transformation project through the TAG process.
- (e) There is no obligation for a DU to obtain prior approval of its energy transformation projects.
- (f) A DU that commenced an energy transformation project prior to the initial adoption of rules under Section 8005(a)(3)(F) may seek approval of the project after such adoption.

7. **Cost-Effectiveness Screening.** 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, the provider shall only offer energy transformation projects that meet the following criteria:

- (a) For efficiency measures that may be offered by Vermont's Energy Efficiency Utilities' ("EEUs") programs pursuant to 30 V.S.A. § 209(d), including those measures identified in the Technical Reference Manual ("TRM"), the DU

shall assess an energy transformation project's eligibility using the statewide cost-effectiveness screening tool provided by the Department;

- (b) Over the project's life, the energy transformation project shall result in a net reduction in fossil fuel consumed by the 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;
- (c) 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;
- (d) Cost-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; and
  - (ii) costs and benefits associated with increased electric sales and financing and lease income;
- (e) For all energy transformation projects, including those identified as cost-effective through the statewide cost-effectiveness screening tool, the energy transformation project shall cost the DU less than the applicable alternative compliance payment ("ACP"); and
- (f) A DU's annual plan shall include reporting on cost/benefit accounting at the program level, including future program year projections when possible.

8. **Banking and Trading in Tier III.** Pursuant to 30 V.S.A. § 8005(a)(3)(F)(iv), DUs may bank any unused fossil-fuel reductions from energy transformation projects for compliance in future years. However, Tier II credits shall be subject to the expiration limit of 30 V.S.A. § 8004(c) whether they are used to satisfy a Tier II obligation or a Tier III obligation.

- (a) In its annual compliance filings a DU shall: (1) document any excess Tier III reductions that it wishes to retain for compliance in future years; (2) indicate any Tier

III 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 wishes to apply towards its Tier III obligations in the current year; and (4) provide documentation of the current amount of banked Tier III credits held by the DU.

(b) Trading of Tier III credits is prohibited.

**9. Evaluation, Measurement, and Verification (“EM&V”).** 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:

- (a) The Department will conduct an annual savings verification to assess a DU’s annual savings claim. The Department will work with a DU to attempt to resolve any issues that may lead to adjustments to a DU’s annual savings claim;
- (b) Savings verification shall include an analysis of measure and project data from DU tracking systems, review of project files, and any field verification visits that are deemed to be appropriate;
- (c) For custom measures or projects, where prescriptive-measure savings assumptions have not been established through the TRM or do not apply, a DU shall maintain in its files documentation of all assumptions and calculations used to establish its savings claim;
- (d) By March 15 of each year, a DU shall submit a report to the Board and the Department that establishes its savings claim regarding its energy transformation projects for the previous year;
- (e) By June 1 of each year, the Department will provide a recommendation to the Board regarding the verified savings achieved by the DU for the previous year;



- (f) Within 15 days of the Department's recommendation each year, the DU or other interested parties may offer comments on the Department's recommendation to the Board;
- (g) Following the comment period, the Board will make a determination regarding the verified savings result for the preceding year;
- (h) DU annual plans may include an EM&V plan, including estimated plan costs. The DUs and the Department are encouraged to work together in advance of filing the annual plan to develop estimated EM&V plan costs;
- (i) In addition to annual savings verifications, the Department will conduct periodic evaluations of energy transformation projects or classes of projects;
- (j) EM&V costs may be billed to the distribution utilities using the Department's authority to allocate expenses pursuant to 30 V.S.A. § 21. EM&V costs shall be allocated proportionally among the costs to evaluate each DU's share of energy transformation projects. For partnership programs between the DU and an EEU, costs may be allocated according to an agreed-upon cost-allocation methodology; and
- (k) Changes to energy transformation project savings claims resulting from periodic evaluations shall not retroactively reduce claims made on behalf of a project approved pursuant to 30 V.S.A. § 8005(a)(3)(F)(ii) or reduce verified claims carried forward pursuant to 30 V.S.A. § 8005(a)(3)(F)(iv). However, such changes may be applied to the treatment of savings claims from projects undertaken in future years.

**10. Equitable Opportunity.** Pursuant to Section 8005(a)(3)(F)(vi), the Board adopts standards to ensure that all ratepayers have an equitable opportunity to participate in and benefit from energy transformation projects, regardless of rate class, income level, or provider service territory.

- (a) A DU that chooses to meet its Tier III obligations through energy transformation projects or a combination of energy transformation projects and additional distributed

generation in a given year shall make energy transformation project opportunities available to all ratepayers, regardless of rate class or income level.

- (i) For the purposes of these standards, rate class shall be broadly defined as customer class or sector, that is, residential customers and commercial and industrial customers.
  - (ii) For the purposes of these standards, income level shall be broadly defined as low income and non-low-income. A low-income customer shall be defined as a customer whose household income is at or below 80% of Vermont statewide median income. The percentage of low-income households in each DU's service territory shall be assumed to be the statewide percentage of low-income households. The Department may provide the statewide percentage of low-income households to the DUs on an annual basis for the purposes of planning and tracking their energy transformation projects. A DU may petition the Board for an alternative definition of "low-income customer," and for a different percentage of low-income customers, that would 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 DU and its customers.
- (b) A DU shall track 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 its Tier III obligation in whole or in part through energy transformation projects. Consideration of whether a DU has provided equitable opportunities to its customers shall be measured over the course of the RES program. A DU shall endeavor to provide equitable opportunities to its customer sectors in rough proportion to each customer sector's annual retail sales. A DU may petition the Board for alternative measurement criteria. Any such petition must demonstrate why alternative measurement criteria are necessary based on the unique circumstances of the DU and its customers.

- (c) To ensure that all ratepayers have an equitable opportunity to participate in, and benefit from, energy transformation projects regardless of their provider service territory, in each year that a DU chooses to meet its Tier III obligation in whole or in part through energy transformation projects, it must offer energy transformation projects to all customer sectors and income levels. When offering such projects, a DU 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 a project is being offered in more than one service territory, the DUs shall ensure, as part of their coordination, that all such information is provided in a consistent manner.
- (d) A DU may provide equitable opportunities to its customers through participation in a statewide initiative, such as a standard suite of energy transformation projects or a common set of technologies.

**11. Coordinated Delivery of Energy Transformation Programs.** In developing energy transformation programs, DUs shall coordinate with other energy efficiency services and programming including, but not limited to, the EEU, weatherization agencies, and affordable housing agencies (collectively, “ESPs”).

- (a) In annual plans submitted pursuant to Paragraph 13, DUs shall demonstrate their efforts to collaborate with ESPs. Outside of the annual planning process, DUs shall continue to share information about program elements, such as incentive structures and marketing and implementation strategies, with other DUs and ESPs.
- (b) In developing energy transformation programs, DUs shall seek to efficiently utilize the resources of other DUs, EEU, and ESPs.
- (c) When EEU and DU 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 annual plans and accounted for in the annual compliance reports for Board review. Should providers be unable to reach a consensus, providers

may appeal to the Board for a resolution. In addition, the Department will be available to assist providers in the mediation of disputes related to the allocation of costs and savings.

- (d) EEUs and DUs may enter into agreements to share resources across a DU 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 and energy efficiency programs.
- (e) DUs or their partners offering energy transformation programs shall advise customers of:
  - (i) the up-front costs, benefits, and long-term maintenance requirements for customer-appropriate technologies (e.g., weatherization; biomass; combined cooling, heating, and power; etc.);
  - (ii) options available to overcome first-cost barriers to participation; and
  - (iii) other efficiency and energy support services available; andshall make referrals for additional information or special services (e.g., services provided by Weatherization Assistance Providers, other DUs, the EEUs, or the Low Income Heating Assistance Program).

**12. Best Practices and Minimum Standards.** Pursuant to Section 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. The following principles shall be employed:

- (a) Best practices for demand management may include the enrollment of a participating customer in an advanced rate program. Advanced rates may include such strategies as critical peak pricing, time-of-use rates, or controllable load rates or riders.
- (b) Best practices for demand management may include other options than advanced rate programs, such as verifying a high level of building

performance to reduce electric demand, or non-monetary behavioral programs to avoid electricity use during peak days or hours.

- (c) Customer and contractor education shall include the advantages and disadvantages associated with an energy transformation project, considering building or vehicle characteristics, fuel types, prices, and customer economics. Education, outreach, and marketing shall aim to deliver uniform statewide messaging and maximize state resources such as the Thermal Energy and Process Fuels Clearinghouse and the Efficiency Excellence Network.
- (d) Marketing information presented to customers on savings associated with energy transformation projects shall be accurate, reflect current fuel prices, and address customer-specific conditions.
- (e) A DU 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 TAG process.
- (f) The savings that a DU may claim for the installation of an energy transformation project in a building achieving minimum energy performance standards shall be determined through the TAG process.
- (g) For a DU implementing energy transformation projects that increase the use of electric energy, an 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, and strategies for customer education, outreach, and marketing.

13. **Annual Planning.** A DU shall file its Tier III annual plan no later than the November 1<sup>st</sup> immediately prior to the start of the next compliance year. Tier III annual plans shall include the following information:

- (a) A description of the estimated Tier III compliance obligation 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 credits, use of any excess Tier II credits, and implementation of any energy transformation projects).
- (b) When a DU's annual Tier III strategy includes implementation of energy transformation projects, its annual plan shall include the information below, as well as any requirements specified in Paragraphs 5 through 12, above:
  - (i) a description of the types of energy transformation projects that will be undertaken (e.g., 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;
  - (ii) a description pursuant to Section 8005(a)(3)(F)(vi) of how all ratepayers will have an equitable opportunity to participate in and benefit from energy transformation projects regardless of rate class or income level consistent with Paragraph 10, above;
  - (iii) a description of any energy transformation project collaborative efforts described in Paragraph 11, above, including a methodology for allocating project costs and savings among ESPs;
  - (iv) when a DU plans to implement an energy transformation project exclusively, an explanation pursuant to Section 8005(a)(3)(E)(i) of why the delivery by the DU is more cost-effective than delivery by another person or that there is no person other than the provider with the expertise or capability to deliver the goods or services; and
  - (v) when a DU plans to implement energy transformation projects that are likely to increase electricity consumption, a description of the best practices for demand management consistent with Paragraph 12, above.

**Schedule of Compliance Filings**

14. **Filing Schedule.** No later than August 31 of each year, a DU shall submit its demonstration of compliance with the RES, including documentation of its total retail sales and documentation of the number and type of RECs or environmental attributes and fossil-fuel savings from energy transformation projects attained. The Department and other interested parties shall have 30 days to submit any comments on a DU's compliance demonstration.

15. **Determination of Compliance and Alternative Compliance Payment.** Following the submittal of a DU's annual compliance filing, the Board will determine whether the DU has met its RES obligations, and in the event it has not, shall determine the appropriate ACP. Pursuant to 30 V.S.A. § 8004(d), the ACP shall be paid to the Clean Energy Development Fund established under 30 V.S.A. § 8015.

16. **Update of Annual Compliance Rates.** Pursuant to 30 V.S.A. § 8005(a)(4)(B), the Board will announce the applicable inflation adjustor annually on or before September 1 for application on the ACP for the following January 1.

Pursuant to Section 8(c) of Public Act No. 56 (2015 Vt., Bien. Sess.), this Order shall take effect on January 1, 2017.

Dated at Montpelier, Vermont, this 28th day of June, 2016.

<u>s/James Volz</u>	)	
	)	
	)	
<u>s/Margaret Cheney</u>	)	PUBLIC SERVICE
	)	
	)	
<u>s/Sarah Hofmann</u>	)	BOARD
	)	
	)	OF VERMONT

OFFICE OF THE CLERK

FILED: June 28, 2016

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

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

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