

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 8550

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

Order entered: 3/15/2016

INTERIM ORDER

I. INTRODUCTION

On June 11 and July 1, 2015, Public Act No. 56 (“Act 56” or the “Act”), an act relating to establishing a renewable energy standard (“RES”), took effect. On August 7, 2015, the Vermont Public Service Board (“Board”) opened this proceeding, pursuant to Section 8 of the Act, in order to implement RES. In this intermediate Order, the Board addresses certain initial aspects of RES implementation that have been the subject of working group meetings, workshops, and written comments.

II. PROCEDURAL HISTORY

On August 26, 2015, the Board convened a prehearing conference, and on September 18, 2015, the Board issued a Prehearing Conference Memorandum and Scheduling Order that reflected the schedule discussed at the prehearing conference.

Board staff convened 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, 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”), VEPP, 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”) each submitted comments addressing certain aspects of RES implementation.

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

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

III. BACKGROUND

Section 8 of Act 56 directs the Board to take the following actions regarding the implementation of a RES:

(a) Commencement: On or before August 31, 2015, the Public Service Board (the Board) shall commence a proceeding to implement Secs. 2 (sales of electric energy; RES), 3 (RES categories), and 7 (tradeable renewable energy credits) of this act.

(b) Notice; comment; workshop. The proceeding shall include one or more workshops to solicit the input of potentially affected parties and the public. The Board shall provide notice of the workshops on its website and directly to the Department, Vermont's retail electricity providers, Renewable Energy Vermont, business organizations such as the Associated Industries of Vermont, environmental and consumer advocacy organizations such as the Vermont Natural Resources Council and the Vermont Public Interest Research Group, and to any other person that requests direct notice or to whom the Board may consider direct notice appropriate. The Board also shall provide an opportunity for submission of written comments, which the notice shall include.

(c) Order. On or before July 1, 2016, the Board shall issue an order to take effect on January 1, 2017, that initially implements Secs. 2, 3, and 7 of this act.

Section 2 of Act 56 amends 30 V.S.A. § 8004 by establishing a RES program; Section 3 of Act 56 amends 30 V.S.A. § 8005 by specifying three categories of required resources to meet the requirements of the RES established under Section 8004: (1) total renewable energy or “Tier I,” (2) distributed renewable generation or “Tier II,” and (3) energy transformation or “Tier III.” Section 3 of Act 56 also amends 30 V.S.A. § 8006 by requiring the Board to establish a system for recognizing tradeable renewable energy credits (“RECs”) and other environmental attributes.

Following the procedural history discussed above, the Board now has sufficient information with which to make determinations addressing certain preliminary RES implementation matters. The purpose of making these preliminary determinations is to provide obligated Vermont electric distribution utilities (“DUs”) with guidance as they begin RES program planning, as well as to settle any areas of disagreement in order to allow the working groups to proceed as they convene over the next several months to discuss the remaining RES program implementation issues.

IV. DISCUSSION - TIERS I & II

A. Use of NEPOOL GIS

30 V.S.A. § 8006 directs the Board to establish or adopt a system to create, monitor, and trade RECs and environmental attributes created by renewable electric generators that qualify under the RES. Section 8006 specifically states that the Board’s system should recognize RECs monitored and traded on the Generation Information System (“GIS”) governed by the New England Power Pool (“NEPOOL”)¹ and should include a process for the recognition, approval, and monitoring of environmental attributes attached to renewable energy that meet the obligations of the RES but are not monitored by or traded on the NEPOOL GIS.

Discussion

After considering the discussions from the working group meetings and the parties’ comments, it is the Board’s conclusion that, to the extent possible, Vermont utilities should demonstrate their compliance with the RES by means of retiring RECs in the NEPOOL GIS. In the RES working group meetings, there was a general consensus among participants that the NEPOOL GIS affords the most effective method for monitoring compliance with the RES. Vermont’s utilities, renewable energy developers, and other interested parties are already broadly familiar with the NEPOOL GIS, which many have used to sell RECs generated by their facilities.

1. We note that the text of Act 56 makes reference to the “New England Geographic Information System.” However, the context of the statute, including the functional capabilities envisioned, make clear that it is intended to make reference to the NEPOOL GIS that is used by other New England states to track and monitor RECs.

Utilizing the NEPOOL GIS best takes advantage of existing infrastructure within New England and will best ensure that the system meets the statutory goal of being “consistent with regional practices.”² Relying principally on the NEPOOL GIS to monitor compliance with the RES will also best integrate the RES with other New England states’ renewable portfolio standard (“RPS”) programs and will help to prevent double counting of attributes between jurisdictions or other undesirable outcomes.

Based on the discussions at the working group meetings, workshops, and in party’s comments, the Board recognizes that there are some instances where, at present, utilizing the NEPOOL GIS for all power purchases qualifying for the RES will not be practicable or effective. These areas are discussed in greater detail below. However, it is the Board’s intention to work to correct these deficiencies so that, in the future, all demonstrations of RES compliance can be made utilizing the NEPOOL GIS. Accordingly, we direct Board staff to undertake such administrative actions as may be necessary to effect the integration of the RES with the NEPOOL GIS.

B. Treatment of Energy from HydroQuebec and the New York Power Authority

DUs purchase energy from HydroQuebec (“HQ”) and the New York Power Authority (“NYPA”)³ and may seek to use these energy purchases for compliance with their Tier I requirements. The NEPOOL GIS issues and tracks unit-specific certificates for all MWh of generation and associated environmental attributes in the ISO-NE control area. However, the NEPOOL GIS currently does not allow for unit-specific certificates to be created for generators in adjacent control areas. Instead, energy and any associated environmental attributes sold into the New England control area from an adjacent control area are tracked at a system level. At present, the system-level environmental attributes are not updated frequently and may not reflect attributes specified in existing power purchase agreements (“PPAs”) with the DUs. The NEPOOL GIS currently has plans to develop the capability to track unit-specific generation and

2. 30 V.S.A. § 8006(a).

3. The NYPA contracts are negotiated by the Department for purchase on behalf of the Vermont utilities and include purchases from the Niagara hydroelectric project (approximately 20 MW) and St. Lawrence hydroelectric project (approximately 1 MW).

attributes from adjacent control areas, but the time frame for completion of this effort is uncertain.

Under the existing PPA between Vermont utilities and HQ, HQ provides attestations to Vermont utilities regarding the environmental attributes of the power purchased (i.e., the attestation specifies the hydroelectric content of the power purchased). In the NEPOOL GIS, the environmental attributes associated with the Quebec grid's system mix can differ from these attestations. With regard to the NYPA PPAs, the current contracts negotiated by the Department do not explicitly entitle Vermont utilities to any specific environmental attributes, but they do include a provision that invites negotiation on this issue. In the NEPOOL GIS, the New York system mix is assigned to the power imported from New York under NYPA contracts.

Participants' Comments

For the power purchases from HQ, because environmental attributes currently are not accurately tracked in the NEPOOL GIS, the Department proposes that RES compliance be determined using the environmental attributes contained in the attestation forms provided to Vermont utilities by HQ. Accordingly, the Department recommends that RES compliance filings document the amount of MWh generation purchased from HQ as tracked in the NEPOOL GIS and then multiply this amount by the “percent renewable” contained in the HQ attestation form to determine the amount of renewable power available for compliance with the RES.

With regard to the power purchases from NYPA, the Department represents that it is in the process of negotiating the acquisition of the environmental attributes associated with the generation purchased from the Niagara and St. Lawrence projects. The Department also proposes to work with NYPA to register the Niagara and St. Lawrence projects in the NEPOOL GIS in order to enable the tracking of unit-specific generation and attributes from these projects.

The Department recommends that when the NEPOOL GIS has the capability to accurately track environmental attributes from adjacent control areas, RES compliance should be documented through the NEPOOL GIS. Given the proposed changes to the NEPOOL GIS currently under consideration, the Department recommends that the Board review the methodology for interregional accounting before a RES rulemaking in 2017.

BED, GMP, and WEC support the Department's recommendations. VLS supports the use of the NEPOOL GIS to track environmental attributes associated with HQ and NYPA generation. VLS contends that without accurate accounting for the environmental attributes of these resources in the NEPOOL GIS, there will be significant opportunities for data inaccuracies and potential double counting. VLS states that if there currently are inaccuracies in the NEPOOL GIS data the focus between now and the implementation of RES should be to improve the accuracy of the NEPOOL GIS data rather than creating external mechanisms that could result in erroneous data and the potential for double counting. REV also raises concerns about double counting and suggests that Vermont support efforts to update the NEPOOL GIS to allow the tracking and retirement of RECs from adjacent control areas.

Discussion

We accept the Department's recommendations with regard to the tracking of environmental attributes associated with the power purchased from HQ and NYPA. The Department's recommendation represents a reasonable approach for determining the unit-specific environmental attributes associated with HQ and NYPA power given that these sources are not tracked at a unit-specific level in the NEPOOL GIS.

Accordingly, the environmental attributes from HQ and NYPA power purchases will be tracked separately from the NEPOOL GIS until the capability is developed to track unit-specific attributes within the NEPOOL GIS. For HQ power purchases, RES compliance filings shall document the amount of MWh generation purchased from HQ as tracked in the NEPOOL GIS and then multiply this amount by the percentage of renewable energy contained in the HQ attestation form to determine the renewable power available for compliance with the RES. For NYPA power purchases, RES compliance filings shall document the amount of MWh generation purchased from NYPA as tracked in the NEPOOL GIS and shall document the unit-specific environmental attributes secured through the NYPA contract. In both cases, DUs shall provide appropriate documentation to demonstrate that the power purchased 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.

We understand that the Department and Vermont utilities will continue to support efforts to ensure that these unit-specific environmental attributes will be tracked in the NEPOOL GIS, and we direct Board staff to support such efforts. When the NEPOOL GIS has the capability to accurately track unit-specific environmental attributes from adjacent control areas, RES compliance shall be documented through the NEPOOL GIS. Given that the NEPOOL GIS has plans to develop the capability to track unit-specific generation and attributes from adjacent control areas, we will review the methodology for tracking RES compliance before the RES rulemaking.

C. Banking of RECs

REC banking is a process whereby a utility that has met its obligation to secure a certain amount of RECs for a particular year may save, or “bank,” any of the RECs it has acquired that year that are in excess of the obligation target. Act 56 governs the Board’s treatment of REC banking for Vermont’s RES program, and it provides, in part:

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.⁴

The Board understands this statutory language to curtail the Board’s authority to limit the amount of RECs that can be banked in any given year, as discussed further, below.

Participants' Comments

A number of participants submitted comments to the Board regarding the banking of RECs, including BED, the Department, GMP, REV, VEC, VPPSA, VLS, and WEC.

BED supports the policy of allowing utilities to bank both Tier I and Tier II RECs for compliance in any of the subsequent three years. BED advocates that no less than 30% of a DU's annual Tier I REC compliance obligation should be able to be banked and proposes that amounts

4. 30 V.S.A. § 8004(c).

as high as 50% annually would not be problematic. BED also argues that DUs should be able to bank up to 50% of their Tier II RECs. BED proposes that allowing banking at these levels will help DUs manage market and alternative compliance payment risks associated with the intermittent performance of renewable generation sources, particularly as renewable energy sources become a larger component of the total generation mix.

The Department advocates for limits on the amount of banking that can occur in a given year. The Department represents that “there was agreement among stakeholders about the need for a relatively high banking limit (30% - 50%) for Tier I RECs.”⁵ Regarding Tier II RECs, the Department notes that setting a limit is difficult because a high banking limit might cause market uncertainty for renewable energy project developers, but a low banking limit would raise the cost of compliance for utilities, which means, ultimately, ratepayers. After originally advocating for a 50% banking limit, the Department, in its reply comments, recommends allowing a utility to bank up to 30% of its annual Tier II REC obligation for use in the subsequent three years.

GMP comments that REC banking provisions are important tools to help limit the cost of RES compliance and to limit uncertainty in that compliance cost. GMP suggests that banking can help utilities manage discrete additions of renewable supply, problems arising from intermittent renewable supply, uncertainty about online dates for new generators, rising RES compliance targets, and other market uncertainties. GMP supports allowing banking of up to 50% of the annual compliance obligation for Tier II RECs. GMP sees no reason to place any limit upon Tier I REC banking, because, GMP argues, “the legislative constraint that banked allowances must be used within three years already provides a significant practical limit on the extent to which utilities may build up a bank of allowances.”⁶

REV supports aligning the RES as closely as possible with the practices of nearby states. Accordingly, REV suggests allowing for banking of up to 30% for Tier I. Noting that Tier II RECs are likely to be predominantly solar, REV indicates that many of its members continue to support banking of 10% for Tier II RECS so as to be aligned with Massachusetts. Notwithstanding, REV supports 30% banking for both Tiers I and II.

5. Department December 18 Comments at 1.

6. GMP December 4 Comments at 2.

VEC states that “there are practical, financial, or environmental benefits to imposing additional banking limits, and we also believe the Board was not given the authority to do so by the Legislature.”⁷ VEC contends that limiting banking will increase the cost of RES compliance, will result in Tier II projects being developed later than they would have been, and will disincentivize the early development of cost-effectively-sized projects. Conversely, VEC argues that if the Board refrains from imposing banking limits, utilities will have more flexibility to meet obligations in a least-cost manner, there will be less uncertainty, and renewable resources will be built more quickly.

VPPSA argues that there is nothing in the statutory language of Act 56 that suggests the Board has the regulatory discretion to limit REC banking. VPPSA notes that there are good, practical reasons for not limiting the banking of RECs. For example, VPPSA points to the variable output of certain renewable generators as a good reason not to limit banking. VPPSA also contends that limiting RECs that can be applied in future years can create lost value to ratepayers.

VLS supports banking of RECs as an efficient policy option for compliance and argues that there should be reasonable limits imposed on banking. VLS supports the limits in the Department's November 11, 2015 filing: 10% banking of Tier I obligations in any given year for compliance in any of the subsequent three years, and up to 50% banking of Tier II obligations in any given year for compliance in any of the subsequent three years.

WEC supports a banking provision because it allows a DU to smooth out its generation and purchases and to meet an unknown future load obligation. WEC points to the example of run-of-river hydroelectric generation. Such generation, argues WEC, is susceptible to wide fluctuations in generation from year to year. “Having the ability to bank in a year when a utility has more than enough renewable generation to meet load is helpful for a future year where it may be short.”⁸ WEC also notes that, while the RES compliance targets increase smoothly over time, renewable project development can be “lumpy.” Banking helps DUs deal with this more easily. Accordingly, WEC supports a minimum 30% banking provision in both Tiers I and II.

7. VEC December 4 Comments at 2; VEC December 18 Comments at 1.

8. WEC December 18 Comments at 1.

Discussion

After reviewing the participants' comments and analyzing the relevant statutory language of Act 56, we conclude that the statute does not provide the Board with the requisite authority needed to limit the amount of RECs that can be banked in any given year.

Traditional rules of statutory construction in Vermont hold that the principal objective of statutory construction is to discern the legislative intent behind a statute.⁹ While the Board can explore a variety of sources to discern that intent – statute, legislative history, the circumstances surrounding the statute's enactment, the legislative policy the statute was designed to implement¹⁰ – where the statute is unambiguous, the Board must rely on the plain and ordinary meaning of the words used.¹¹

On its face, the statute requires that, beginning in 2017, the Board “shall” allow a provider to retain (or bank) RECs. 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.” In the absence of any limiting statutory language regarding the number of RECs that can be banked, we conclude that the Board does not have the statutory authority to limit the number of RECs that can be banked in any given year.

Furthermore, we note that 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. According to our reading, this means that a provider can apply and retire any RECs banked in Year 0 in any one of the following years: Year 1, Year 2, or Year 3. By statute, after the third year, a credit can no longer be used for RES compliance.

Therefore, we conclude 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.

9. *Merkel v. Nationwide Ins. Co.*, 166 Vt. 311, 314 (1997).

10. See, *Town of Killington v. State*, 172 Vt. 182, 189 (2001).

11. *In re P.S.*, 167 Vt. 63, 70 (1997).

D. Administrative Process for Banking of RECs

In order for providers to bank RECs as envisioned by Act 56, the Board must adopt a process for those RECs to be tracked and monitored. During the working group meetings that preceeded the adoption of this Order, participants noted that the NEPOOL GIS does not possess the capabilities needed to track RECs held for compliance in future years.

Participants' Comments

The Department proposes that the Board adopt a spreadsheet-based tracking mechanism that can be utilized to track RECs banked by utilities. Under its proposal, the Department suggests that DUs include the following information regarding banked RECs in their annual compliance filings: (1) the total number of RECs obtained by the DU during the compliance period; (2) the number of those RECs that will be used to satisfy the DU's current year compliance obligations; (3) the number and calendar year vintage of banked RECs that will be used to satisfy RES compliance or other obligations¹² in the current year, if any; and (4) the number of RECs that the DU intends to place into its bank of RECs for use in future years. Other participants were generally supportive of this component of the Department's proposal for tracking banked RECs.

In its proposal, the Department states that RECs that the DU is seeking to bank should be retired in the NEPOOL GIS. However, BED observes that the NEPOOL GIS places certain limitations on how RECs can be retired, including that, under the current NEPOOL GIS operating rules, a DU can only retire RECs up to its overall load obligation. Given that the RES imposes compliance obligations on DUs that begin to approach their overall load obligation, this has the potential to limit a utility's ability to bank RECs consistent with the statute. Accordingly, BED suggests that DUs seeking to bank RECs move those RECs into a reserve account within the NEPOOL GIS, which would continue to achieve the purpose of ensuring that the attributes associated with such RECs are not claimed by a third party.

12. In particular, the Department cites the retiring of RECs in compliance with a utility's renewable energy rider or green pricing program.

Discussion

After considering the participants' comments, we conclude that DUs wishing to bank RECs should place those RECs into a reserve account in the NEPOOL GIS. DUs would then be responsible for maintaining documentation of their use of banked RECs and, at the time of their annual RES compliance filings, utilities would submit a spreadsheet or other document detailing their use of banked RECs, including the information described by the Department. These compliance filings would also include supporting documentation from the NEPOOL GIS to demonstrate that these resources were placed into a reserve account. This documentation would then be reviewed and adopted by the Board as part of its annual compliance review. Accordingly, we direct Board staff to work with the Department and the DUs to develop a spreadsheet model to be used for these compliance filings.

E. Certification of Qualified Generators

In order to utilize the NEPOOL GIS to track and monitor RECs eligible for compliance with the RES, Vermont must adopt a method for qualifying generators as eligible producers of RES-compliant RECs.

Participants' Comments

In its comments, the Department proposes that the Board adopt a process whereby a generator may apply for a ruling that it is eligible as a Vermont RES-compliant resource by submitting certain key information, including its fuel source, NEPOOL GIS generator identification number, date of construction, and capacity. The Board would then issue a qualification letter to the facility and to the NEPOOL GIS stating that the facility has qualified as a RES-qualified generator; the qualification letter would include the facility's NEPOOL GIS identification number. The Department also recommends that the Board consider requests for qualification when reviewing a generator's petition for a certificate of public good under 30 V.S.A. § 248, which could then be finalized with a registration or simple form submittal when the applicant has acquired a NEPOOL GIS identification number. In addition, the Department recommends that for Tier I resources, which may not have completed a Vermont qualification,

the Board allow DUs to demonstrate in their compliance filings that the resource meets the RES standards by providing appropriate information. The Department also suggests that the Board designate all existing projects participating in the standard-offer program as RES-qualified. Finally, the Department recommends that the Board investigate the use of an automated mechanism within NEPOOL GIS to qualify existing facilities for Tier I based on their generation type and other relevant information.

BED, GMP, WEC, VEC, and VPPSA generally express support for the Department's proposal and for adopting an automated method of qualification for existing Tier I eligible generators. WEC and VEC also suggest that the Board should consider qualifying all resources that have been qualified in other New England states as eligible for Tier I.

VEPPI recommends that all generators seeking to qualify for the RES be required to fill out an application form.

Discussion

We conclude that the process outlined by the Department is an appropriate mechanism for qualifying generators for RES. Accordingly, we direct Board staff to develop a registration form that includes the NEPOOL GIS identification number for the facility, information related to the facility's fuel source, date of construction, and any other information needed to assess the facility's eligibility for compliance with the RES.

We note that neither participants' comments or working group discussions have addressed the process for the review of requests to become a RES-qualified generator. At this time, the Board proposes to adopt a registration process wherein generators whose fuel source matches a list of pre-approved fuel types will submit a registration form that includes their NEPOOL GIS identification number, the plant capacity of the facility in question, the date of construction, the utility system with which the plant is interconnected, and the facility's fuel source. The registration would include a certification as to the accuracy of the material submitted and would be deemed approved following a certain period for review and comment. Those generators that do not utilize a fuel source presumed to qualify for the RES could petition the

Board for a declaratory ruling that the energy from the generator meets the statutory criteria of the RES Tier for which they are seeking qualification.

The Board seeks comments from participants on this method of qualifying generators for the RES.¹³ In addition, we direct Board staff, in consultation with the working group participants, to develop a list of fuel sources that may be presumed to qualify as renewable resources under the RES.

Participants also discussed the qualification of facilities constructed under the standard-offer program. In the event that the Board adopts the registration procedure outlined above, the Board will direct the Standard-Offer Facilitator to register the standard-offer plants pursuant to that process.

In addition to seeking to develop a simplified registration process for qualified resources, we observe that the statutory criteria for eligibility as a Tier I resource simply require that the resource meet the statutory definition of renewable in Section 8002 and be capable of delivery to the New England grid. Given this broad requirement and to facilitate the adoption of the RES, we direct Board staff to pursue a process for automatically qualifying existing resources in New England by means of a search of the NEPOOL GIS for potentially eligible resources.

F. Net Metering and Behind-the-Meter Generation

In initial comments and working group meetings, one of the issues raised by participants was the process to track, record, and verify RECs generated by net-metered and other behind-the-meter facilities that utilize renewable fuel sources. These units may qualify for both Tiers I and II, provided that the DU owns the rights to the RECs, but, due to their small size, may be difficult or expensive to track individually in the NEPOOL GIS.

Stakeholder Comments

The Department proposes that DUs aggregate net-metered and behind-the-meter resources by fuel type and then register each type in the NEPOOL GIS. This reporting would then be verified by a third party to confirm the DUs' ownership of the RECs and the accuracy of

13. These comments should be included in participants' comments due on April 8, 2016.

the metering data. The Department also recommends that the Board adopt a simple certification process to determine whether aggregated projects qualify for Tier II.

GMP, VEC, and VPPSA express support for the Department's proposal regarding the monitoring of generation from net-metered and behind-the-meter facilities.

BED and WEC agree with the Department's recommendation that net-metered and behind-the-meter generation be tracked and aggregated but recommend that the Board not require third-party verification. In support of their argument that a third-party verifier is not needed, BED and WEC note that Vermont utilities, unlike providers in other New England states with third-party verification requirements, are not deregulated and are therefore subject to a higher level of scrutiny and reporting requirements that may not apply in other states. As such, they argue, the additional cost of hiring a third party to review their metering data would constitute an unnecessary burden. In addition, BED argues that the DUs should not be required to aggregate their projects but, rather, should be allowed to register projects individually in the NEPOOL GIS, if appropriate, and utilize aggregation as a method for bringing their generation information into the NEPOOL GIS.

VEPPI argues that third-party verification should be required and observes that it is required under other New England states' RPS programs.

REV expresses its support for tracking net-metered and behind-the-meter projects through the NEPOOL GIS and also supports third-party verification.

VLS supports a requirement for third-party verification.

Mr. Weiss argues that the Board should adopt a system that would monitor and report the production both of systems for which the DU owns the RECs associated with those systems and systems where the RECs are retained by the owners of those systems. Mr. Weiss argues that this would reduce the tension between DUs and customers regarding ownership of RECs and would provide for a more accurate accounting of Vermont's overall progress in meeting its renewable energy goals.

Discussion

We conclude that, consistent with our desire to utilize to the fullest extent possible the existing NEPOOL GIS system to monitor compliance with the RES, attributes and RECs associated with net metering and behind-the-meter projects should be tracked through the NEPOOL GIS. We also conclude that aggregation should be an approved method to bring such information into the NEPOOL GIS and direct Board staff to pursue such modifications to NEPOOL GIS operating rules as may be needed to develop an aggregation process for net-metered and behind-the-meter resources. However, we recognize BED's argument that aggregation need not be the only path for DUs to import such information into the NEPOOL GIS and we do not restrict a utility's ability to register such projects individually in the NEPOOL GIS. However, we note that such projects would need to be qualified through the qualification process the Board adopts in its final order implementing the RES. In addition, we seek comment on the appropriate standards of verification, including verification of the metering data and DU ownership of RECs, for such projects.

We are also persuaded by those DUs arguing that independent, third-party verification is not needed to ensure that such aggregation is conducted properly, provided that DUs meet standards for metering and auditing the accuracy of their ownership of the RECs from net-metered and behind-the-meter facilities. We seek comment from participants on what standards the Board should adopt for DU monitoring of their aggregated reporting of generation from these facilities.

Turning to Mr. Weiss's argument that the Board should adopt a system that tracks both systems where the RECs are owned by the DU and systems where the RECs are retained by the owner of the system, we will not adopt a system that requires DUs to aggregate and report RECs retained by customers. We observe that 30 V.S.A. § 8006 only directs the Board to establish a system for monitoring "electric generation qualifying for the RES,"¹⁴ and that, generally, DUs must own the attributes or RECs associated with the generation they are using to qualify for the

14. 30 V.S.A. § 8006(a).

RES.¹⁵ Accordingly, we will not adopt in this Order a requirement that DUs monitor systems that do not qualify for the RES. We also note that, in the event that the RECs associated with these systems are already being aggregated and used for compliance in another jurisdiction, these attributes are already being tracked in the existing NEPOOL GIS system.

V. DISCUSSION - TIER III

Section 8005(a)(3)(F) states, in part:

Implementation. To carry out this subdivision (3), the Board shall adopt rules:

- (i) For the conversion methodology in accordance with subdivision (3)(D) of this subsection (a).
- (ii) To 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 this 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.

A. Conversion Methodology for Calculating Fossil Fuel Savings

Section 8005(a)(3)(F)(i) requires the Board to adopt a rule for the conversion methodology in accordance with subdivision (3)(D). Section 8005(a)(3)(D), in turn, states:

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. If an energy transformation project is funded by more than one regulated entity, the Board shall prorate the reduction in fossil fuel consumption among the regulated entities. In this

15. In the case of Tier II, 30 V.S.A. § 8005(a)(2)(B)(ii) specifically requires that net-metering systems are only eligible provided that "the interconnecting retail electricity provider owns and retires the system's environmental attributes."

subdivision (D), “regulated entity” includes each provider and each efficiency entity appointed under subsection 209(d) of this title.

Participants' Comments

The Department provided an illustrative worksheet (the “Department’s Proposal”) at the October 1, 2015, working group meeting that demonstrates the values and calculations necessary to convert energy transformation project's fossil fuel savings into a MWh equivalent using the applicable values provided by the U.S. Energy Information Administration (“EIA”). The Department recommends the use of this worksheet to convert energy transformation project's fossil fuel savings into a MWh equivalent.

VEIC¹⁶ and GMP¹⁷ both support the Department’s Proposal, and no participant objected or made an alternative proposal.

Discussion

We hereby adopt the Department’s Proposal for use in determining MWh-equivalent electric energy values that result from energy transformation projects. We request that the Department make this spreadsheet publicly available for use by the utilities, their partners, and other interested persons. Further, we request that the Department maintain the spreadsheet on an annual basis with appropriate values from the EIA.

B. Process for Prior Approval of Energy Transformation Projects

Section 8005(a)(3)(F)(ii) requires the Board to adopt a rule to:

. . . provide a process for prior approval of energy transformation projects by the Board or its designee. The process shall ensure that each of these projects meets the requirements of this 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.

16. VEIC December 4 Comments at 7.

17. GMP December 4 Comments at 2.

All stakeholders in this proceeding support using the existing Technical Advisory Group (“TAG”) process as the process to be adopted under the Board rule. The TAG consists of representatives from the Department and the energy efficiency utilities (“EEUs”) and is open to participation by other stakeholders. To date, the focus of the TAG has been on: (1) reviewing and approving energy efficiency measure characterizations; (2) the methodology and associated assumptions underlying measure-savings calculations that are included in the Technical Reference Manual (“TRM”); (3) program implementation procedures; and (4) serving as a general forum for the discussion of technical issues related to EEU savings claims and methodologies.

Participants' Comments

BED supports the use of the TAG structure for characterizing Tier III measures. However, because VEIC currently acts as both an advocate and administrator of the TAG process, BED recommends that the Board hire an independent third-party to conduct an in-depth review of the TRM on a periodic basis, suggesting every three to five years. In addition, BED proposes an alternative TAG structure that would include a measure sponsor (responsible for all initial technical analysis and research) who would first be required to make a prima facie case to the Department that the measure is appropriate for further review. If so, the measure would be subject to peer review by members of the TAG who would review the measure sponsor’s analyses and conduct independent research. A measure would be included in the TRM with a simple majority vote by the peer review committee. BED also suggests the inclusion of an administrator/manager, which BED suggests could be assigned by the Board on a rotating six-month basis or could be assigned to Board staff.¹⁸

CLF supports using the existing TAG and TRM, as administered by VEIC, for prior approval of energy transformation projects. CLF contends that it is helpful to have technologies pre-approved to give clear guidance on the cost and savings that energy transformation projects can deliver. CLF recommends that the pre-approval process be efficient and expeditious, while

18. BED December 18 Comments at 1-3.

maintaining the needed integrity to provide sound guidance as to what technologies are suitable for investment.¹⁹

CLF suggests that technologies could be put into three categories: Green, Yellow, and Red. Green technologies would be pre-approved through the TAG and would be generally accepted as appropriate Tier III technologies. Yellow projects would include custom measures that have not undergone TAG review because they are unique, multi-faceted, or large projects. Red projects would be those generally not suitable for Tier III, including untested technologies that the TAG believes are unlikely to produce worthwhile savings sufficient to warrant pre-approval.²⁰

The Department supports the use of the TAG process for prior approval of energy transformation projects.²¹ The Department also recommends that a pathway for custom measures be created, provided that DUs meet with the Department in advance of implementing a custom measure to ensure that any savings claims related to custom measures are verifiable.²²

GMP supports having VEIC continue to lead TAG and TRM activities and proposes expanding the existing TRM document to incorporate Tier III eligible measures where appropriate. GMP also supports opening the TAG process to all interested stakeholders.²³

REV generally supports VEIC's November 18, 2015, "straw proposal" for a process for prior approval²⁴ and also supports many of CLF's December 18 comments.²⁵

VEC generally supports using the TAG process to characterize measures for "energy-switching" under Tier III.²⁶ VEC also recommends a process outside of the TAG process whereby the Department, upon the request of a DU, would review and approve energy

19. CLF December 18 Comments at 1.

20. CLF December 18 Comments at 1-2.

21. Department December 4 Comments at 6.

22. Department December 4 Comments at 7.

23. GMP December 4 Comments at 2.

24. REV December 4 Comments at 2. VEIC's November 18 "straw proposal" addresses a process for new measure characterization by the TAG as well as DU annual planning and reporting.

25. REV December 18 Comments at 1.

26. VEC December 18 Comments at 3.

transformation project values when those projects have relatively straightforward “conversions” or for which the DU has particular expertise.²⁷

VEIC proposes that the existing TAG processes be expanded and utilized for characterizing the greenhouse gas emission and energy savings of energy transformation projects used to satisfy Tier III obligations. VEIC suggests that this process would help ensure that common assumptions (such as a measure’s quantified costs and benefits) are used throughout the state and among EEUs and DUs. VEIC states that the TAG has been in existence for 15 years and, in that time, has evolved such that its processes can be adapted readily to use for Tier III functions.²⁸

VPPSA believes that where specific technologies are likely to be deployed statewide and in a similar manner, the TAG should be utilized to characterize a measure to be included in the TRM. In addition, VPPSA contends that utilities should be able to request prior approval of projects that do not go through the TAG process and should have the flexibility to pursue custom measures without receiving prior approval. VPPSA also argues that all DUs need to be informed of potential Tier III measure characterizations being conducted at the TAG so that they can participate in the discussions.²⁹

WEC supports the use of the TAG process but believes alternative screening approaches should also be allowed in the event a DU develops an alternate approach. While WEC believes that DUs will work closely with the EEUs, WEC would like flexibility to be built into the rules to allow DUs to develop alternative approaches. In particular, screening mechanisms other than the TAG/TRM tool should be allowed.³⁰

Discussion

After reviewing the stakeholder comments, the Board finds it reasonable to adopt the TAG process for the prior approval of energy transformation projects pursuant to Section 8005(a)(3)(F)(ii). We make this finding based on the TAG’s experience in characterizing energy

27. VEC December 4 Comments at 2.

28. VEIC December 4 Comments at 8.

29. VPPSA December 4 Comments at 3-5.

30. WEC December 18 Comments at 2, 3.

efficiency measures, as well as the existing procedures the TAG has in place. In addition to developing and approving energy transformation project's measure characterizations and performing cost-effectiveness screening, the TAG shall be responsible for ensuring that each prescriptive project meets the eligibility requirements of § 8005(a)(3). The TAG is requested to file with the Board, by no later than January 31 of each year, energy transformation projects that it reviewed during the previous calendar year, and the eligibility determinations that it has made for such projects, accompanied by an appropriate discussion of how each approved project meets the eligibility requirements.

While the TAG process may be useful to the DUs in obtaining prior approval of energy transformation projects, DUs are not required to obtain prior approval through the TAG for all projects. We find it appropriate to provide the DUs flexibility to develop and propose innovative, custom measures without going through the TAG process, as many commenters requested of us. Accordingly, in lieu of obtaining prior approval for an energy transformation project through the TAG, DUs may petition the Board directly for prior approval of energy transformation projects or may petition the Board for an alternative process for prior approval. In addition, we do not find any statutory requirement that DUs obtain prior approval for their energy transformation projects. However, we do encourage DUs that elect to design and implement a custom project or program — with or without prior approval — to consult with the Department before implementing the project or program to determine whether the savings associated with the project or program are verifiable. We observe that it will be difficult for a DU to substantiate a savings claim for an energy transformation project if the project's savings are not measurable or verifiable.

With respect to BED's proposal that the Board consider an alternative TAG structure that would include a measure sponsor, peer review committee, and administrator/manager, while we would be open to considering such alternative TAG structures, we find that this proceeding — focused on establishing rules for the implementation of RES — is not the proper venue for adopting such structural changes that would affect the work of the EEU's and the Department.

C. Who Can Propose Projects for TAG Review?

Historically, the TAG has served as the venue for reviewing energy efficiency measures for inclusion in the TRM and for use by the EEU's. Accordingly, it was the EEU's that proposed measures to be considered by the TAG. Having determined that the TAG process will be adopted as a process for prior approval of energy transformation projects, the Board must determine who may propose energy transformation projects to the TAG for prior approval in order to ensure that TAG resources are utilized efficiently.

Participants' Comments

CLF argues that a DU, EEU, or the Department should be able to sponsor a measure to be screened, characterized, and potentially approved through the TAG process. In addition, CLF suggests that any party should be able to propose projects to the TAG for review, potentially with the safeguard of an initial review by the Department to ensure that TAG resources are not wasted on reviewing measures that are unlikely to be implemented or beneficial.³¹ VPPSA concurs.³²

The Department recommends that an initial set of energy transformation projects be characterized by the TAG — with the Board approving the measures as the initial set of measures to be characterized through the TAG process. The Department recommends that after this initial list, DUs may bring projects to the TAG for review. In addition, the Department suggests that vendors may bring projects to the Department for an initial screen and, if after analysis the Department believes that full TAG review of the project would be valuable, the Department would sponsor the project in the TAG.³³

VEC and GMP believe that potential Tier III measures should be sponsored by a DU before going through TAG review.³⁴

31. CLF December 18 Comments at 2.

32. VPPSA December 4 Comments at 4.

33. Department December 18 Comments at 4-5.

34. VEC December 18 Comments at 3; GMP December 4 Comments at 1.

NEGPA suggests that VEIC's November 18, 2015, "straw proposal" is too narrow and that stakeholders should be able to bring prospective projects to the TAG for review and characterization regardless of whether requested or supported by a DU.³⁵

VEIC supports project sponsorship by either a DU or the Department.³⁶

VPPSA suggests that any non-utility service provider should be permitted to request project characterization, subject to an initial screening by the Department.³⁷

Discussion

The responsibility to comply with the Tier III obligations rests with the DUs. Accordingly, we anticipate that the majority of potential energy transformation projects brought to the TAG for characterization will be those sponsored by one or more DU. Accordingly, we find it appropriate to authorize the DUs to submit potential energy transformation measures directly to the TAG for review and characterization. While we anticipate that the DUs will pursue a variety of beneficial and least-cost energy transformation projects as part of their least-cost integrated planning, we do not want to preclude potential energy transformation projects entirely from consideration by the TAG solely because they are not at first sponsored by a DU. Accordingly, for those measures that are not immediately sponsored by a utility, we conclude that it is appropriate to enable interested persons to present their project to the Department for an initial screen; if the Department sees potential value in the project, the Department may share its information with the DUs, which may determine whether to pursue full evaluation of the project through the TAG. In addition, the Department may sponsor a project for TAG review itself. We conclude that these safeguards on who may propose projects for TAG review appropriately ensure that TAG resources are used in an efficient manner on projects that are most likely to be offered by the DUs, while also allowing for the introduction of innovative measures by interested persons.

35. NEGPA December 4 Comments at 1.

36. VEIC December 4 Comments at 10; December 18 Comments at 2.

37. VPPSA December 4 Comments at 4.

D. Paying for the Process for Prior Approval of Energy Transformation Projects

The review for prior approval of potential energy transformation projects by the TAG will require the TAG members to incur expenses that must be reimbursed. Several stakeholders submitted comments regarding how to pay for this work performed by the TAG.

Participants' Comments

BED notes that the cost of TAG and TRM maintenance for EEU purposes is pro-rated based on energy loads and recommends that this approach be continued, with two changes: (1) DUs should not be obligated to pay for measures that do not apply to their service area, unless they elect to do so; and (2) DUs that have a reduced energy transformation goal should be allowed to reduce their socialized cost-sharing obligation by a proportional amount.³⁸

CLF contends that, because the TAG process serves the needs of all DUs and all DUs may use the TRM, the costs of TAG review should be shared among all DUs. In the event that a project does not pass the initial review by the Department, discussed above, CLF proposes that the proponent should have the option to pay for TAG review themselves in order to get the measure reviewed by TAG.³⁹

The Department recommends that the TAG process be paid for by the DUs on a pro-rata basis based on each DU's load share. The Department further recommends that DUs make their share payments to the EEU Fiscal Agent. Alternatively, the Department states that it could bill back the DUs if the Board so orders. Subsequently, vendors that bring forth projects for review would be responsible for the costs associated with the Department's initial review, as well as any subsequent TAG review. Similarly, the cost of subsequent characterization of measures at the request of a DU (or DUs) would be the responsibility of the sponsoring DU (or DUs).⁴⁰

GMP suggests that the costs associated with the TAG should be shared among the participating DUs and their partners, potentially utilizing a billback through the Department.⁴¹

38. BED December 18 Comments at 3-4.

39. CLF December 18 Comments at 2. Because we have determined not to allow potential projects to be reviewed by the TAG absent DU or Department sponsorship, we do not address CLF's latter proposal.

40. Department December 18 Comments at 5.

41. GMP December 4 Comments at 1.

VEIC proposes invoicing the Department for activities leading to measure characterization by the TAG, recommending that the invoice would be split by some agreed-upon proportion among the DUs, but paid in full by the Department to VEIC directly.⁴²

VEC argues that the cost of the TAG process should be socialized among all utilities proportionate to the size of their Tier III obligation. VEC also proposes that product manufacturers contribute to the cost of measure characterization when appropriate.⁴³

VPPSA recommends that the costs of project characterization be shared by the DUs.⁴⁴

Discussion

Because all DUs may benefit from an energy transformation project's review for prior approval by the TAG, we conclude that it is appropriate for the costs of the TAG process to be divided among the DUs based on a pro-rata share of their annual retail sales. The Department has indicated that it will utilize its billback authority under 30 V.S.A. § 20 for its expenses in the process for prior approval of energy transformation projects. This appears to be a reasonable solution, and we concur with the Department that its TAG-related expenses should be billed to the DUs based on a pro-rata share of their annual retail sales. Further, we conclude that VEIC's expenses related to TAG review of potential energy transformation projects should also be paid in full by the Department and collected from the DUs based on each DU's pro rate share of annual retail sales. We also agree that it is reasonable for the Department to bill a project proponent directly for the costs of the Department's initial review of potential projects. Further, we find BED's suggestion — that a DU should not be obligated to pay for the review of a potential energy transformation project by the TAG if that project is not applicable to that DU's service territory — to be reasonable and adopt it, with the clarification that a DU seeking this exemption must be able to demonstrate that the potential project cannot be implemented in its service territory. Any disputes concerning costs associated with this process for prior approval of energy transformation projects may be brought to the Board for resolution.

42. VEIC December 18 Comments at 2.

43. VEC December 18 Comments at 3.

44. VPPSA December 4 Comments at 4.

VI. CONCLUSION

The implementation of the RES involves a complex undertaking among utilities, the EEU's, renewable energy developers, energy service providers, and many other participants. We anticipate that the determinations reached today may need to be refined as we develop further insights through the continuing process outlined in our order opening this proceeding. Participants should continue to address those issues that have not been resolved today through the remaining steps envisioned in this proceeding to inform the Board's final order implementing the RES.

SO ORDERED.

Dated at Montpelier, Vermont, this 15th day of March, 2016.

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

OFFICE OF THE CLERK

FILED: March 15, 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)