



Vermont Agency of Natural Resources

Office of Planning

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October 17, 2019

Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street – 4th Floor
Montpelier, VT 05620-2701

Re: 19-0855-RULE, Response to August 22, 2019 Additional Information Request

Dear Ms. Whitney:

On August 22, 2019, the Vermont Public Utility Commission (“Commission”) issued a Request for Additional Information and Discussion of Next Steps (“Additional Information Request”) regarding its review of Commission Rule 5.100, the net-metering rule (Case No. 19-0855-RULE). The Vermont Agency of Natural Resources (“Agency”) offers the following response to the Additional Information Request.

A. Net-Metering Compensation Structure

Items 1 through 15 of the Additional Information Request pertain to the net-metering compensation structure. Apart from welcoming discussion on the topic, the Agency did not comment on compensation structure in its initial comments in this case and generally defers to the Vermont Department of Public Service (“PSD”) on the issue.

That said, and in response to information requests 5 and 6, the Agency notes that net-metering can reduce greenhouse gas emissions and air pollution by providing financial incentives for deployment of renewable energy technologies that replace fossil fuel alternatives, provided renewable energy credits are retired. These environmental benefits accrue to society in general and support the greenhouse gas reduction goals codified in 10 V.S.A. § 578(a). The benefits are not restricted to net-metered facilities; they can be realized by renewable energy generation facilities of all scales.

Net-metering is not without environmental costs. In response to information requests 9 and 10, construction of net-metering systems, like any construction project that uses fuel-

burning equipment or generates dust, creates temporary air emissions. Also, all forms of energy development, including distributed renewable energy generation, require land.¹ Conversion of land from natural conditions, as can happen with net-metering systems on undeveloped sites (*i.e.*, “greenfields”), can result in loss of or damage to natural landscapes. These natural landscapes provide numerous environmental benefits to Vermonters, including clean air and water, crop pollination, carbon sequestration, flood protection, and fish and wildlife habitat.² While Agency regulations and the criteria of 30 V.S.A. §248 (b)(5) prevent any “undue adverse” effects that would stem from net-metering systems, adverse effects may still occur (*e.g.*, loss of productive forestland).

These environmental costs are not unique to net-metering. Larger capacity, non-net-metered renewable energy generation facilities can have similar costs. Whether the costs of such larger facilities are greater or lesser, on a per kW basis, than net-metering systems is an open question. For example, it is conceivable that a two-megawatt solar electric generation facility could have less environment impact, on a per kW basis, than four 500-kW facilities spread across the landscape and not located on previously developed sites.

Information request 12 asks, “If the current net-metering compensation system does not balance the costs and benefits of net-metering, please describe how the compensation system could be changed to better balance costs and benefits.” The costs of developing net metering systems varies by site. Among preferred site types, brownfields and National Priorities List (*i.e.*, Superfund) sites, because of real or perceived environmental contamination, are inherently more challenging and potentially costly to develop, especially if required environmental site assessments or remedial activities have not been completed prior to entering the permitting process. Just one net-metering system on a brownfield preferred site and no net-metering systems on Superfund preferred sites have received certificates of public good since the effective date of the current net-metering rule.³

Brownfield and Superfund sites receive the same siting adjustor as all other preferred site types, yet the costs of developing them can be significantly greater. To better balance the costs and benefits of net-metering system development on these sites, the Agency recommends the Commission consider whether they merit an enhanced siting adjustor. Feedback from developers on this topic should be encouraged.

¹ Trainor, A. M., McDonald, R. I., & Fargione, J. (2016). *Energy Sprawl Is the Largest Driver of Land Use Change in United States*. Plos One, 11(9). doi: 10.1371/journal.pone.0162269.

² *Vermont Conservation Design: Maintaining and Enhancing an Ecologically Functional Landscape*. Vermont Fish and Wildlife Department, 2018.

³ Several net-metering systems have been developed at sites that could have qualified as brownfield preferred sites but instead received preferred designation through joint letters of support. A few net-metering applications are being developed now for systems that intend to receive brownfield or Superfund preferred site designation.

B. Preferred Sites

The Agency responds to the information requests regarding the joint letters of support preferred site—one of two options under preferred site 7—as follows:

16. What standards or criteria should regional and local bodies apply to determine whether a site should be designated as “preferred”?

Regional and local bodies should consider the “known constraints” and “possible constraints” mapping standards from the PSD’s determination standards for certification under 24 V.S.A. § 4352.⁴ These constraints signal likely and potential unsuitability for development for environmental, legal, or regulatory reasons, and include features like rare, threatened, and endangered species occurrences and lands protected for conservation or recreation purposes.

In many cases, these constraints are not absolute; site-specific investigation may be needed to verify their occurrence on a proposed net-metering site. Nevertheless, their consideration by municipalities and regional planning commissions should help screen for projects that are likely to raise significant environmental concerns and may not meet the criteria of 30 V.S.A. § 248(b)(5). Every regional planning commission in Vermont has an enhanced regional energy plan that identifies known and possible constraints, so the information needed to screen projects for potential conflicts with these features is readily available.

The determination standards and, by extension, the known and possible constraints mapping standards may be amended as the Comprehensive Energy Plan is revised.⁵ For that reason, the Commission should consider whether it would be helpful to use broader terms (*e.g.*, “environmental constraints identified in PSD’s determination standards”) instead of “known constraints” and “possible constraints” in any revised definition of preferred site 7 intended to address this request.

Before designating a site as preferred in a letter of support, regional and local bodies should also consider whether development of a net-metering system at that site is consistent with applicable regional and municipal plans. If a letter of support designates a site as preferred and that site conflicts with the policies of applicable regional and municipal plans, then the letter should explain why the bodies support preferred designation despite those conflicts. For regional planning commissions and municipalities with enhanced energy plans that have received a determination of energy compliance under 24 V.S.A. § 4352, letters of support should designate sites as preferred only if they are designated as such in their plans or provide an

⁴ See Act 174 Recommendations and Determination Standards, available online at: <https://publicservice.vermont.gov/content/act-174-recommendations-and-determination-standards>.

⁵ See 30 V.S.A. § 202b and 24 V.S.A. § 4352(d)(3).

explanation for why preferred designation is appropriate outside the process followed to develop their enhanced energy plans. Further, any regional planning commission or municipality that designates a site as preferred that contains known or possible constraints should explain in their letter why the site is preferred despite the presence of such constraints.

It may be helpful to require that letters of support articulate what land use policies and environmental characteristics make the site preferred even in cases where a preferred site is not in conflict with regional or municipal plans. This would ensure signatories have considered the public value of a net-metering system at a particular site. Pro-forma letters that do not provide a basis for preferred designation should be discouraged.

The availability of public water and sewer service, which would suggest a site may be better purposed for residential or commercial development instead of or in conjunction with a net-metering system, could also be considered by regional or local bodies in determining whether a site should be designated as preferred. The Agency defers to other stakeholders as to whether this would be an appropriate standard or criterion to apply.

17. Which entity should be responsible for making a determination that a preferred site meets the applicable standards and criteria? Should it be the local planning body, the regional planning body, or the local legislative body? Or all three?

The local planning body, regional planning body, and local legislative body should all be responsible for deciding a preferred site meets the applicable standards and criteria. Each body represents a different perspective and can serve as checks on each other (*e.g.*, a project supported by a local legislative body that does not comport with a town or regional plan and thus does not receive a letter of support from a local or regional planning body should not receive preferred designation).

18. What procedures should regional and local bodies follow before designating a site as preferred? Should notice be provided to adjoining landowners and the public before this decision is rendered?

The Agency supports an open and deliberative process around local preferred site designation. The specific procedures should be left to municipalities and regional planning commissions, provided: (1) discussion of preferred site designation occurs at meetings open to the public; (2) the process provides for consideration of known and possible constraints and applicable regional and municipal plans in relation to proposed net-metering systems; and (3) the process ensures sufficient information, as described below, is provided by applicants to regional and local bodies before a site is designated as preferred.

19. What information should applicants be required to provide to regional and local bodies before a site is designated as preferred?

Applicants should be required, before a site is designated as preferred, to provide regional and local bodies a project description and site plan commensurate with the advance notice requirements under Commission Rules 5.106(C)(3) and 5.107(B)(3). To ensure known and possible constraints are considered by regional and local bodies, Applicants should also be required to provide an analysis of these features in relation to their proposed projects.

20. Should a local determination that a site is or is not a preferred site be subject to review by the Commission? If so, what procedures should the Commission use to review such determinations?

The Commission's review of a local determination that a site is or is not preferred should be limited to ensuring the joint letters of support filed with net-metering applications evince compliance with the definition of preferred site 7. The decisions of regional and local bodies should be final; the Commission should not hear appeals of local determinations, as that would undermine the intent of preferred site 7.

The Agency reminds the Commission that several net-metering applicants have used the joint letters option of preferred site 7 when preferred sites 4 (brownfields), 5 (landfills), or 6 (mineral extractions sites) could have been used. Applicants may be doing this to circumvent the requirements of definitions 4, 5, and 6. In the case of brownfields and landfills, such circumvention reduces opportunities for pre-application consultation with Agency programs that can provide assistance to applicants and host landowners. In the case of mineral extraction sites, joint letters of support may be sought to avoid reclamation requirements. The Agency recommends the Commission consider limiting the joint letters of support option to those sites where other preferred site types do not apply.

C. Administrative Issues

The Agency appreciates the Commission's interest in streamlining the net-metering registration form and has no objection to the additional fields proposed in Attachment B. The Agency has already recommended the form be modified to require applicants for hydroelectric systems to list permit numbers and authorization dates for all Federal Energy Regulatory Commission and Agency licenses, exemptions, and permits associated with the facility. The Agency also recommended that any registration process extended to parking lot canopy systems require additional information regarding hazardous sites and stormwater management and include site plans and elevation drawings. Please see the Agency's initial comments in this case for additional details.

Thank you for the opportunity to respond to the Additional Information Request. The Agency looks forward to participating in the rulemaking and expanding on these comments and the Agency's initial comments.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'BC', is positioned above the printed name.

Billy Coster
Director of Planning

Cc: Service List