STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7628

Joint Petition of Green Mountain Power Corporation, Vermont Electric Cooperative, Inc., and Vermont Electric Power Company, Inc. for a certificate of public good, pursuant to 30 V.S.A. Section 248, to construct up to a 63 MW wind electric generation facility and associated facilities on Lowell Mountain in Lowell, Vermont, and the installation or upgrade of approximately 16.9 miles of transmission line and associated substations in Lowell, Westfield and Jay, Vermont	)

Order entered: 3/31/2014

PROCEDURAL ORDER RE CONTINUOUS NOISE MONITORING RECOMMENDATIONS

I. Introduction and Procedural History

On August 8, 2013, the Public Service Board ("Board") conducted a technical hearing to consider the imposition of sanctions under 30 V.S.A. § 30 against Green Mountain Power Corporation ("GMP") for violations of the noise standard imposed on the operation of GMP's wind electric generation facility located in Lowell, Vermont (the "Project") that were identified in GMP's required reports covering sound monitoring that took place during the Fall and early Winter of 2012 and the Winter of 2013.[1]

1. Condition 39 of the Board's Order and Certificate of Public Good approving the Project requires GMP to "construct and operate the proposed project so that the turbines emit no prominent discrete tones pursuant to ANSI standards at the receptor locations, and project-related sound levels at any existing surrounding residences do not exceed 45 dBA(exterior)(Leq)(1 hr) or 30 dBA (interior bedrooms)(Leq)(1 hr)." Docket 7628, Order of 5/31/11 at at 165; CPG dated 5/31/11 at 8.

Following the hearing, briefs were filed by GMP, the Department of Public Service ("Department") and Donald and Shirley Nelson (the "Nelsons"). GMP filed a reply brief. No other party filed a reply brief.[2]

In their briefs, both the Department and the Nelsons discussed the desirability of continuous noise monitoring for the Project. In its reply brief, GMP noted that it was willing to investigate the possibility of continuous monitoring and to review its findings with the Department.

Given the interest expressed by the Department and the Nelsons in the possibility of continuous monitoring, as well as GMP's stated willingness to explore such a possibility, on September 25, 2013, we directed GMP to undertake an investigation into the feasibility of continuous monitoring for the Project and to file a report with the Board reflecting its findings within 90 days.[3]

On December 23, 2013, GMP filed its report with the Board, along with a cover letter describing a program of continuous monitoring that it proposed to undertake.

On January 8, 2014, the Department and the Nelsons each filed responsive comments that were critical of GMP's report and proposal.

On January 21, 2014, we issued an Order in which we determined that GMP's report and proposal for a period of continuous sound monitoring lacked sufficient information for the Board or the parties to determine the feasibility or efficacy of the monitoring GMP had proposed. As a result, we established a schedule that provided for two rounds of written discovery and a date for the parties to file final comments and recommendations on the feasibility of continuous sound monitoring for the Project.[4]

On February 28, 2014, GMP, the Nelsons and the Department each filed their final comments and recommendations regarding continuous sound monitoring.

In today's Order, we outline for the parties what the Board would view as necessary components for a continuous sound monitoring proposal, and direct the parties to attempt to

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2. On September 10, 2013, the Nelsons filed a correction to their initial brief.
3. Docket 7628, Order of 9/25/13 at 2.
4. Docket 7628, Order of 1/21/14 at 5-6.

reach agreement on a specific proposal for filing with the Board within 30 days of the date of this Order. In the event that none of the parties can agree on such a proposal, we will proceed to determine the amount of civil penalty to be imposed under 30 V.S.A. § 30 for the violations considered during the August 8, 2013, technical hearing, and will then terminate this investigation into those violations.

II. Recommendations of the Parties

A. Green Mountain Power

GMP states that it believes that its December 23, 2013, continuous monitoring proposal remains appropriate. However, GMP also states that it is prepared to undertake more extensive monitoring if the Board believes that is necessary, consistent with guidelines enumerated by GMP. In its recommendations, GMP states that: (1) it is amenable to allowing the Department or an independent third party to be responsible for the monitoring; (2) it would not oppose a continuous monitoring period of up to one year; (3) the costs associated with monitoring in more than one location are not justified by the incremental benefit that might result; (4) background sound must be properly eliminated from the monitoring data; and (5) use of real time data to identify violations and shut down the turbines is not practicable. GMP states that if the Board determines that a more extensive monitoring protocol is needed, the Board should identify the general characteristics of such a protocol and direct GMP and the Department to file a proposal based on the Board's guidance within one month.[5]

B. The Nelsons

The Nelsons recommend that: (1) an independent third party be responsible for conducting any continuous monitoring; (2) continuous monitoring be imposed for the life of the Project; (3) if monitoring is conducted by GMP's current sound consultant, that it take place at a location other than their residence;[6] (4) if monitoring is conducted by a firm the Nelsons believe is trustworthy, monitoring can occur at their residence; (5) any equipment used for continuous monitoring should be certified to operate to as low an ambient temperature as possible and be

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5. Letter from Peter H. Zamore, Esq., to Susan M. Hudson, Clerk of the Board, dated February 28, 2014.

6. The Nelsons represent that their neighbors, the Cowles, are amenable to hosting monitoring and that their residence is appropriately located for this purpose.

capable of measuring infrasound and low frequency sound; and (6) continuous monitoring is not only necessary, it is urgently needed.[7]

C. Department of Public Service

The Department recommends that the Board "proceed with its pending noise violation penalty investigation against GMP without consideration of a continuous sound monitoring requirement at this time."[8] The Department identified the capabilities that it believes are necessary for a program of continuous monitoring to be effective and reliable, including the use of at least two monitoring locations. Based on its review of information provided by GMP, the Department concluded that an acceptable cost option was not available that included the capabilities the Department believes are necessary, and that the Board should therefore proceed with its penalty investigation. The Department represents that it is in the process of hiring its own sound consultant with the intent of developing accurate and cost-effective monitoring options and protocols that can be used throughout the state to confidently ensure protection of the public health and safety.[9]

III. Discussion

In today's Order we set forth the basic characteristics of an acceptable continuous noise monitoring proposal and direct the parties to attempt to reach and file an agreement for the Board's consideration within 30 days of the date of this Order. We take this step to provide guidance to the parties so that they are able to fully discuss their recommendations with each other in an attempt to reach agreement – an agreement that could achieve a more constructive outcome from this investigation than would be achieved by the simple imposition of a civil penalty on GMP.

This investigation was instituted pursuant to 30 V.S.A. § 30 in response to several violations of the Project's noise standard that were identified by GMP in two of its required sound monitoring reports.[10] Under Section 30, the Board is required to impose a civil penalty for these violations and does not have the statutory authority under that section to require a

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7. Nelson Comments at 2-5.
8. Department Comments at 3.
9. Department Comments at 2-3.
10. Docket 7628, Order of 7/15/13.

program of continuous monitoring by GMP in lieu of a civil penalty. However, in determining the amount of the penalty to be imposed, the Board does have the authority to consider mitigating factors, and to resolve a contested case by "stipulation, agreed settlement, consent order, or default" unless specifically prohibited by law from so doing in a particular case.[11] The Board has relied on this statutory grant of authority to approve settlements filed in response to penalty investigations under Section 30 where the settlement provides value above and beyond what would be achieved by simply imposing a civil penalty.[12] The value of a settlement may also be considered by the Board when determining the amount of the penalty to be imposed under Section 30.[13]

We appreciate the efforts the parties have put into their research and recommendations but are concerned that the lack of an agreement between or among any of the parties may require us to simply impose a civil penalty on GMP and close this matter without taking advantage of the opportunity to implement some program of continuous monitoring. In particular, our acceptance of the Department's recommendation would appear to compel such an outcome.

After reviewing the three parties' recommendations, we have determined that it might prove helpful to provide guidance on what the Board would view as an acceptable continuous monitoring proposal for the purpose of resolving in part this particular investigation. The guidelines below are general in nature but should provide the parties direction for reaching consensus on a proposal. The guidelines are intended to provide the framework for a cost-effective plan that will provide sufficient data to understand whether the Project operates in compliance with the applicable noise standard, and in the event that it is not in continuous compliance, to provide information for the Board and parties to understand any causes of non-compliance and what steps GMP must take to prevent future non-compliance. In developing these guidelines we have given careful consideration to the recommendations of GMP, the Nelsons and the Department, and recognize that GMP made two important concessions with

11. 3 V.S.A. § 809(d).

12. *See e.g., Petition of Georgia Mountain Community Wind*, Docket 7508, Order of 11/29/12 at 6-7.

13. *See* 30 V.S.A. § 30(c)(8).

respect to the oversight and length of a monitoring program, presumably in response to earlier comments from the Nelsons and the Department.

Duration of Monitoring Period

We agree with GMP that a continuous monitoring period of one year would be appropriate. We understand that the Nelsons would prefer that continuous monitoring occur for the life of the Project. However, we conclude that a one-year period would yield sufficient data to gain a full understanding of Project operations and compliance with the applicable sound standard. If one year of continuous monitoring shows regular compliance, then additional monitoring would yield little incremental value. However, if one year of continuous monitoring shows that the Project is not regularly in compliance with the sound standard, the Board would retain its authority to order additional appropriate relief, in the form of additional sound monitoring or otherwise.

Number of Monitoring Sites

GMP asserts that a single monitoring site would be sufficient because the incremental information gained from additional sites would not outweigh the costs that would be incurred from using multiple sites.

The Department states that at least two monitoring sites are needed to ensure the collection of reliable data.

After careful consideration of this issue, we conclude that one monitoring site would be sufficient for the purpose of a continuous monitoring proposal in this investigation, provided that it is an appropriately selected site and is representative of residential sites that are subject to the highest levels of sound emanating from the Project. While we concur with the Department that multiple monitoring sites would be ideal, this ideal should not preclude this opportunity to implement continuous monitoring, and we believe the benefit to be gained from a single continuous monitoring site outweighs the benefits that would be realized from resolving this investigation solely through the imposition of a financial penalty.

Implementation and Oversight of Monitoring

We appreciate GMP's willingness to accept an independent third party to conduct the monitoring and believe that there is value in this approach. While we have no basis to believe that GMP's sound consultant has conducted monitoring to date in anything other than an appropriate manner, we also understand that the Nelsons do not share our confidence. Given that there is value to be obtained from public confidence in the process, we would expect the parties to attempt to reach agreement on a third party to implement a monitoring program, and note that previously several parties were able to agree on the identity of a third party to oversee GMP's initial implementation of its approved sound monitoring plan.[14] As recommended by GMP, all data generated by the monitoring must be available to the parties for review and confirmation purposes.

In the event the parties are unable to reach agreement on a third party to implement any agreed-upon monitoring program, then they should so notify the Board and submit a list of candidates under discussion with their relevant qualifications and experience clearly set forth. Each party may also submit comments indicating its preferred ranking of candidates on the list and why they favor one candidate over the others. Based on a review of the submitted information, the Board will select the third-party candidate it deems most qualified.

Location of Monitoring Site

If the parties are able to reach agreement on a third party to implement monitoring, the Nelsons should inform the Board whether they are willing to host the monitoring. If the Nelsons do not wish to host the monitoring, then the third party selected to perform the monitoring shall select an appropriate monitoring site, and as described above, shall ensure that it is one that is representative of residential sites that are subject to the highest levels of sound emanating from the Project.

Background Sound

As noted by GMP, no monitoring will be properly indicative of Project-only sound levels without removal of background sound. We conclude that GMP's proposal to rely primarily on Method 3[15] to eliminate background sounds, while utilizing Method 2 under specified circumstances to calibrate Method 3, is a viable approach, in particular because of the not

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14. The parties agreed to use Cavanough-Tocci Associates for this purpose.

15. References to "Methods" are references to the various processes for removing background sound levels from monitoring data described in GMP's approved sound monitoring plan.

insignificant impacts that exclusive reliance on Method 2 would have on Project operations. In the event the third party conducting the monitoring believes that adjustments are needed to the process being used to eliminate background sound, we fully expect to be informed of that fact and retain the authority to direct any necessary adjustments.

Access to Real Time Data

We appreciate the Nelsons' desire for access to real-time data, but are persuaded by GMP's comments on why this is not practicable, in particular by the time lag that is necessarily created by the need to filter and remove background sound levels in order to isolate Project-only sound levels. An exercise in continuous monitoring will only be worthwhile if the data reported on Project sound levels is accurate and reliable, and we conclude that real-time data access would not be consistent with this need because it would create the potential for significant confusion by individuals accessing the real-time data and attempting to understand what it represents. We understand GMP's recommendation to include reporting the results of monitoring on a monthly basis and we would find this sufficient. However, as noted above, if continuous monitoring indicates that the Project is not in regular compliance with the applicable sound standard, we would retain the authority to revisit this question.

Capability of Equipment

We agree with the Nelsons that any monitoring equipment used should be certified to operate at as low a temperature as feasible and that it be capable of low frequency and, if possible, infrasound monitoring.

With these guidelines in mind, we hereby direct GMP to negotiate in good faith with the parties that have standing on this issue in an attempt to reach agreement on a continuous sound monitoring proposal and to file any such agreement with the Board within 30 days of the date of this Order, whether it be among all or some of the parties participating in this investigation. In the absence of such an agreement, we will be compelled to accept the Department's recommendation and resolve this investigation solely through the imposition of a financial civil penalty on GMP. Should that occur, we direct GMP to advise the Board on whether it would be willing to voluntarily commit to a period of continuous sound monitoring consistent with the guidelines set forth in today's Order for the Board's consideration as a mitigating factor when determining the amount of a civil penalty under Section 30.

SO ORDERED.

Dated at Montpelier, Vermont, this 31st day of March, 2014.

s/ James Volz	)	
	)	PUBLIC SERVICE
	)	
s/ David C. Coen	)	BOARD
	)	
	)	OF VERMONT
s/ John D. Burke	)	

OFFICE OF THE CLERK

FILED: March 31, 2014

ATTEST: s/ Susan M. Hudson
Clerk of the Board

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

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