

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

**BRIEF OF THE DEPARTMENT OF PUBLIC SERVICE REGARDING VIOLATIONS
OF THE KINGDOM COMMUNITY WIND NOISE STANDARD**

The Department of Public Service (“DPS” or the “Department”) by its undersigned Director for Public Advocacy hereby submits its brief and recommendations regarding the imposition of penalties against Green Mountain Power Corporation for violating the noise limits contained in the Certificate of Public Good (CPG) issued for the Kingdom Community Wind Project (KCW or Project). Based on its review as set forth in the prefiled testimony of Allan D. St. Peter and on the evidence presented at the hearing held on August 8, 2013¹, the Department recommends that a penalty of \$9,000 would be appropriate for each of the six violations. The Department also presents below an alternative proposal that it believes would better promote the public good, and allow the parties and Board to gain information that could assist with a more far-reaching resolution of issues related to the Project.

The Department continues to believe that identification and correction of noise-related problems is of paramount concern. St. Peter pft at 8. GMP’s evidence tends to show that the

¹ All references to a hearing and to the hearing transcript in this Brief are to the August 8 hearing and transcript.

cause of the violations has been identified (snow accumulations on the turbine blades) and is in the process of being resolved, Castonguay pft at 4-5. However, testimony filed by Mrs. Nelson and cross-examination at the hearing tended to show (1) that noise from the KCW's turbines is having impacts on health and quality of life, and (2) that GMP's investigation of potential noise issues prior to submitting its application for a CPG may have been insufficient.

IMPACTS ON HEALTH AND QUALITY OF LIFE

Shirley Nelson's prefiled testimony describes dramatic effects on her health and quality of life. This testimony was unrebutted, and no witness was presented with the requisite qualifications to address her health-related claims. *See* tr. at 67-69 (Kaliski), 133 (St. Peter). Mrs. Nelson's testimony goes directly to the first "factor" listed in 30 V.S.A. § 30(c) (extent to which "the violation harmed or might have harmed the public health, safety or welfare . . .). However, the Department is not in a position to quantify the extent of the impact of the turbines' sound on her health. St. Peter pft. at 5. Furthermore, there has been recognition by both GMP's witness and the Board that annoyance – as distinct from quantifiable and diagnosable health impacts – may have a significant impact on quality of life at sound levels below the CPG 45 dBA exterior noise limit. *See* tr. at 79 (Kaliski) ("annoyance from wind turbine projects are due to many factors, both acoustical and non-acoustical."); Docket 7628, PSB Order dated 5/31/12 at 92 ("Noise levels associated with adverse health impacts and sleep disturbances are typically higher than 45 dBA (exterior). However, there can be indirect health impacts from wind turbine generated noise levels below 45 dBA, including sleep disturbance or deprivation, annoyance, and stress.").

Mrs. Nelson's assertions regarding impacts to her health are uncontroverted by prefiled testimony or by questioning under cross-examination, but it is apparent in her testimony that her quality of life is impacted during operation of the facility even below the 45 dBA standard. The Department in no way discounts Mrs. Nelson's complaints, but the record here is not sufficient to link her complaints to the violations at issue. Her testimony shows that the effects she describes occur even when the Project is operating in compliance with the CPG. Tr. at 79-80 (Kaliski).

The Board explicitly found that a noise standard of 45 dBA (exterior) is sufficient to protect public health and sleep disturbance, as well as the existence of adverse health impacts at sound levels higher than 45 dBA. PSB Order dated 5/31/12 at 92. Here, GMP has submitted empirical evidence to the Board reflecting six separate violations of CPG sound threshold during the monitoring periods. It is therefore reasonable to infer that public health is placed unnecessarily at risk during those times, a conclusion consistent with Mrs. Nelson's testimony.

One noteworthy aspect of Mrs. Nelson's testimony is found not in the testimony itself but in Mr. Kaliski's reaction to it. Notwithstanding his earlier docket testimony that the noise standards under consideration would be protective of human health and quality of life, Mr. Kaliski was unsurprised by Mrs. Nelson's statements regarding impacts on her health. Tr. at 78-79. Regulators who relied, in part, on Mr. Kaliski's earlier testimony might well have a different reaction. *See* tr. at 28 (Castonguay).

In the Department's view, the existence of admitted multiple CPG violations during periods representing a small sample of the Project's operational history, coupled with the unchallenged testimony of Mrs. Nelson, supports a penalty at the higher end of the range proposed in Mr. St. Peter's testimony.

ADEQUACY OF GMP'S PRE-APPLICATION INVESTIGATION

Prior to submitting a CPG application under §248, GMP had discussions with turbine vendor Vestas. Vestas turbines are installed at other locations with cold climates, and Vestas was aware of the intended location of turbines being purchased by GMP. The turbines were purchased with a “winter operating package.” Nonetheless, the potential for snow to affect turbine noise was never discussed with Vestas. Tr. at 14-16, 24 (Castonguay); Castonguay pft. at 3.

In addition to discussing operational issues with Vestas, GMP retained RSG Inc. to investigate potential noise impacts of the Project. Tr. at 14. The RSG expert, Mr. Kaliski, has been involved in approximately 50 wind turbine projects, including some in the northeast. Tr. at 77, 125 (Kaliski). Nonetheless, Mr. Kaliski was unaware of the potential for snow to affect turbine sound until after the KCW Project was in operation. Tr. at 128-129.

The Department is not asserting that the evidence here conclusively shows that GMP's pre-application investigation was either adequate or inadequate. However, as the Project developer and § 248 applicant GMP had a duty to undertake reasonable investigation of the potential impacts of its proposed project on the criteria of § 248. What the evidence does show is that despite discussions with Vestas about winter operation, and despite consulting an expert experienced with many wind turbine projects, including ones in cold climates, GMP was unaware the potential for snow to affect turbine noise until after the Project was in operation. The evidence in the record here is sufficient to support imposition of a penalty toward the upper end of the range proposed in the DPS's testimony, if only to underscore the critical importance of an applicant's duty to undertake reasonable pre-application investigation.

CONTINUOUS NOISE MONITORING

Mr. St. Peter's testimony on behalf of the Department proposed that any penalties by directed toward "a meaningful improvement in the monitoring of noise at the site," possibly by continuous monitoring. GMP's testimony raised concerns about the cost and feasibility of such monitoring (although it is being done at another project with which Mr. Kaliski is involved). Tr. at 89 (Kaliski). Based on its own research, tr. at 144 (St. Peter), the DPS continues to believe that continuous noise monitoring may have merit, and would prefer that any money paid in lieu of a civil penalty be spent in a manner that is related to the KCW Project and provides a public benefit. The Department therefore proposes that the Board hold in abeyance the imposition of a penalty under § 30, and direct GMP to investigate the cost and feasibility of continuous noise monitoring of the Project. GMP should be directed to file a report with the PSB and parties describing the results of its investigation, and the parties should then have an opportunity to file recommendations. If such monitoring is judged to be feasible, useful, and not excessively costly the DPS would be willing to make its best efforts to negotiate an agreement with GMP with the aim of directing payments in lieu of a penalty toward continuous monitoring.

The Board has raised the question of its authority to order that civil penalties assessed under § 30 be directed to purposes other than the state's General Fund. *See* 32 V.S.A. § 502. The PSB has in the past approved agreements that accomplished the purposes of a penalty without requiring payment of a civil penalty to the PSB, but instead provided a benefit directly to the public. For example in Docket 7579, where the Stowe Electric Department agreed to install vehicle charging stations without rate recovery, essentially in lieu of a § 30 penalty. Docket 7579, Order of 4/8/13. While the Board's authority to impose such a remedy may be questioned,

the Department sees no impediment to PSB approval of an agreement that effectively penalizes a utility outside of the confines of § 30.

Dated at Montpelier, Vermont, this 28th day of August, 2013.

VERMONT DEPARTMENT OF PUBLIC SERVICE

By: _____


Geoffrey Commons
Director for Public Advocacy

cc: Service list