

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7250

Amended Petition of Deerfield Wind, LLC, for a)
certificate of public good authorizing it to construct and)
operate a 15-turbine, 30 MW wind generation facility,)
and associated transmission and interconnection)
facilities, on approximately 80 acres in the Green)
Mountain National Forest, located in Searsburg and)
Readsboro, Vermont, with 7 turbines to be placed on the)
east side of Route 8 on the same ridgeline as the existing)
GMP Searsburg wind facility (Eastern Project Area), and)
8 turbines along the ridgeline to the west of Route 8 in)
the northwesterly orientation (Western Project Area))

Order entered: 4/29/2016

FOURTH ORDER RE: COMPLIANCE FILINGS

I. INTRODUCTION

On February 22, 2016, Deerfield Wind, LLC (“Deerfield”) submitted information in response to the Vermont Public Service Board’s (“Board”) compliance orders dated January 8, 2016, pertaining to conditions contained in an order (the “Order”) and amended certificate of public good (“Amended CPG”) issued by the Board on July 17, 2009, for construction and operation of a 30 MW wind electric generation facility located in Searsburg and Readsboro, Vermont (the “Project”). Deerfield’s response addresses the Federal Aviation Administration (“FAA”) Determinations of No Hazard to Air Navigation (“Determinations”), the blasting plan (“Blasting Plan”), the construction and operational stormwater permits, and the decommissioning plan for the Project.

For the reasons set forth below, in this order we accept the FAA Determinations, the blasting plan, the stormwater permits, and the decommissioning plan, and determine that these materials satisfy the requirements for compliance with the relevant conditions of the Order and Amended CPG.

II. PROCEDURAL HISTORY

On January 8, 2016, the Board issued an order (“Order re: First and Second Compliance Filings” or “First Compliance Order”) addressing the first two sets of compliance materials filed by Deerfield. The Board stated that Thomas Shea (“Mr. Shea”) would have a two-week period to provide comments on the stormwater permit application materials that the Board ordered Deerfield to provide.

Also on January 8, 2016, the Board issued an order (“Order re: Third Compliance Filing” or “Second Compliance Order”) addressing the third set of compliance materials filed by Deerfield.

On February 22, 2016, Deerfield filed additional materials requested by the Board in the First and Second Compliance Orders. The additional materials include a response to the Board request regarding the FAA Determinations, a revised blasting plan, application materials referenced in the construction and operational phase stormwater permits, and a revised decommissioning cost estimate.

On February 29, 2016, Mr. Shea requested an extension of time to file comments on the stormwater permit application materials.

On March 14, 2006, the Board granted an extension of Mr. Shea’s review period to April 1, 2016.

On April 1, 2016, Mr. Shea filed comments on the stormwater permit application materials.

On April 15, 2016, Deerfield filed a response to Mr. Shea’s comments.

On April 27, 2016, Wind Action Group (“WAG”) filed comments in response to Mr. Shea’s comments.

III. DISCUSSION

The FAA Determinations

Condition 33 of the Amended CPG states:

Deerfield shall obtain and submit the final Federal Aviation Administration determination prior to the erection of the turbine towers. Parties shall have two weeks to comment on the filing.

In the First Compliance Order, the Board directed Deerfield to clarify with the FAA whether re-analysis of the FAA Determinations for the turbines is required based on turbine micro-siting and/or based on the revised turbine heights, which are less than the height referred to in the FAA Determinations.

Deerfield stated in its February 22, 2016, filing that the FAA Determinations previously filed with the Board reflect the revised turbine locations and turbine heights specified in Deerfield's final design plans filed on June 1, 2015. Deerfield provided a side-by-side comparison of the turbine locations and heights specified in its final design plans and in the FAA Determinations. The comparison of turbine locations consists of the latitude and longitude for each turbine location, which are the same for the Project plans and the FAA determinations.

The comparison of turbine heights indicates that the actual turbine heights will be 399 feet (G87 model) and 415 feet (G97 model), and the FAA Determinations are based on turbine heights of 428 feet. Deerfield states that a higher turbine height was provided to the FAA to account for potential changes in turbine model and to allow for minor variations in existing site elevation.

Based on this information, Deerfield contends that no further FAA filing is necessary. While Deerfield did not obtain clarification from the FAA, we note that the FAA recently updated the frequently asked questions on their website to clarify that there is no need for a new study for Determinations for structures based on a decrease in the height of the structure.¹ Therefore, we determine that the FAA Determinations previously filed by Deerfield satisfy the requirements of Condition 33 of the Amended CPG, with the caveat that Deerfield remains responsible for ensuring it complies with all permit requirements.

1. <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=generalFAQs>; latest revision 12/11/2015.

Blasting Plan

Conditions 24, 25, 26, and 27 of the Amended CPG pertain to blasting and development of a blasting plan for the Project. In the First Compliance Order, the Board directed Deerfield to file a revised Blasting Plan, signed by a licensed, certified blasting technician, with the following revisions and additions:

(a) The Blasting Plan shall be revised by clarifying the text regarding the use of blast mats as follows:

“The blasting mats will be employed when blasting within 500 feet of nearby structures, roadways and other sensitive areas, as well as in other circumstances deemed appropriate by the blaster to protect people, structures, roadways, and sensitive areas located around the blast sites.”

(b) The Blasting Plan shall be modified to indicate that the blasting schedule, and any subsequent changes to the schedule, will be provided to property owners within a one-half mile radius of the blasting site, at least one week prior to commencement of blasting activities.

(c) The Blasting Plan shall be modified by increasing the time for advance notification to property owners of the public meetings from one week to two weeks.

(d) The Blasting Plan shall be modified by incorporating the Vermont Agency of Natural Resources (“ANR”) blasting best management practices (“BMPs”) into the Plan.

Deerfield provided a revised version of the blasting plan (dated “Revised as of February 8, 2016”) that includes the revisions required in the First Compliance Order. Therefore, we determine that the revised blasting plan fulfills the requirements of Conditions 24 through 27 of the Amended CPG.

Stormwater Permits

Condition 17 of the Amended CPG states:

Deerfield shall submit to the Board and parties its NPDES Permit for Construction Sites for the Project prior to the commencement of earth-disturbing construction activities.

Condition 18 of the Amended CPG states:

Deerfield shall submit to the Board and parties its Vermont operational phase stormwater permit prior to the creation of any impervious surfaces at the site.

In the First Compliance Order, the Board directed Deerfield to file the Erosion Prevention and Sediment Control (“EPSC”) Plan incorporated by reference as part of the NPDES construction permit. The Board also directed Deerfield to file copies of the site plans, detail sheets, and all application materials and supporting information incorporated by reference in the operational phase NPDES permit. Deerfield was directed to provide a copy of the permit application materials to Mr. Shea.

In its February 22, 2016, filing, Deerfield provided operational phase stormwater permit application materials and plans dated March 8, 2011, construction stormwater permit application materials and plans dated September 9, 2011, revised permit application materials and plans dated November 23, 2011, and revisions and final plans based on ANR review dated February 28, 2013.

Mr. Shea provided his own comments on the stormwater permit materials and additional comments prepared by an independent engineer. Mr. Shea contends that the level spreaders proposed as part of the operational stormwater control plan for the Project were installed at another wind energy site in Vermont (Docket 7628, Kingdom Community Wind) in 2011, that none of the required monitoring has been conducted at that site, and that this raises substantive issues with regard to the Section 248 criteria. Mr. Shea requests a hearing on Deerfield’s stormwater discharge permit and plan based on his contentions that use of level spreaders is experimental, their use on an existing project site has not been monitored for effectiveness, and the Deerfield Project setting is a unique and fragile setting.

Mr. Shea’s engineer contends that there is national consensus for use of level spreaders on slopes no greater than 10%. The engineer provides discussion refuting each of the Deerfield stormwater engineer’s assertions about the use of level spreaders at the Project site. On technical points, the engineer contends that Deerfield’s stormwater engineer mis-modeled stormwater runoff as sheetflow over 150 feet below the level spreaders, when it should have used 100 feet. The engineer cites a Natural Resource Conservation Service (“NRCS”) reference from 2001 and concludes that Deerfield’s stormwater engineer “. . . has modeled the hydrology of the stormwater runoff counter to accepted standards for calculating time of concentrations and peak flow of runoff.” Mr. Shea’s engineer concludes that use of the NRCS modeling approach would

result in the prediction of increased peak flows and an increased probability of violating performance standards.

Mr. Shea's engineer also states that the Deerfield stormwater monitoring plan lacks methods or parameters to assess the effectiveness of the level spreaders and buffers to meet the stormwater quality and volume management they are intended to provide. He contends, based on his review of public records from the Vermont Department of Environmental Conservation, that there is no evidence that any post-construction stormwater monitoring has been conducted, as required by the stormwater permit, at the Kingdom Community Wind site where level spreaders were incorporated as part of the stormwater controls. He therefore concludes that there is insufficient information about the effectiveness of level spreaders in steep terrain and that there is uncertainty regarding the State's ability to ensure permit compliance for the Deerfield Project.

WAG's comments reiterate Mr. Shea's comments regarding concerns with stormwater monitoring at the Kingdom Community Wind project site, and the appropriateness of using level spreaders on steep slopes.

Deerfield contends that Mr. Shea is seeking to litigate issues that should have been raised through an appeal of the stormwater permit, that the issue of stormwater monitoring was already addressed by the Board in its January 8, 2016, compliance order, that the Lowell Mountain project stormwater issues were resolved by the Board² and upheld by the Vermont Supreme Court, that Mr. Shea's stormwater concerns are not related to his status as an intervenor,³ and that

Mr. Shea's concerns regarding stormwater impacts from the Project lack substantive merit.

The operational phase stormwater permit application materials describe how the standards in the Vermont Stormwater Management Manual ("VSMM") are met by the Project via use of sediment basins and alternative stormwater treatment designs consisting of level spreaders with 150-foot vegetated buffers. The plans meet the design and monitoring requirements of the VSMM, and the level spreader designs meet the specifications in draft

2. In re: Lowell Mountain Wind Project Stormwater Permit #6216-INDC, Docket No. 7628, 2013 WL 1191203 Order of March 20, 2013; aff'd, 2014 VT 50.

3. Order of November 6, 2007, at 8.

revisions to the VSMM for high-elevation sites. The application materials and final permit plans address minor revisions made in the design process and as a result of ANR's review. The use of an alternative stormwater treatment approach requires monitoring, and the application materials describe the monitoring plan to be implemented to monitor total suspended solids and total phosphorous in downgradient surface waters.

We agree with Deerfield that many of Mr. Shea's (as well as WAG's) concerns relate to the details of ANR's permit, which should have been challenged through an appeal of the permit rather than through comments here. Based upon our examination of Mr. Shea's and WAG's comments, we find that they have not presented sufficient evidence to indicate that the stormwater permit cannot be relied upon as part of our evidentiary conclusion that the Project will not have an undue adverse effect upon soil erosion. In particular, we find no basis to conclude that the technical issues raised by Mr. Shea's engineer regarding a "national consensus" for appropriate slopes for use of level spreaders and regarding the modeling inputs used to estimate peak flows point to deficiencies in the stormwater modeling, design, and operational phase stormwater permit for the Project. Finally, we determine that the use and function of level spreaders on a different project site, and the status of ANR's stormwater monitoring for that project, are not relevant to the Deerfield Project compliance determination.

The construction stormwater permit application materials include the EPSC Plan and details regarding compliance with ANR's requirements regarding construction monitoring, construction sequence, and winter construction season requirements.

We determine that the submittals, in conjunction with the stormwater permits previously filed, fulfill the requirements of Condition 17 and Condition 18 of the Amended CPG.

Decommissioning Cost Estimate

Condition 21 of the Amended CPG states:

Prior to commencement of construction, Deerfield shall prepare a revised detailed estimate of the costs of decommissioning, covering all of the activities specified in the Decommissioning Plan. The Plan shall certify that the cost estimate has been prepared by a person(s) with appropriate knowledge and experience in wind generation projects and cost estimating. The cost estimate shall be submitted to

the Board for review and approval. Parties shall have two weeks to file any comments.

In the Second Compliance Order, the Board required Deerfield to “. . . provide confirmation of the per-turbine cost of demolishing and disposing of each concrete foundation and transformer pad; to clarify the line item for meteorological tower removal, replacing it, if appropriate, with removal of the two light detection and ranging (“LiDAR”) stations; and to confirm the extent of roads to be removed, regraded, and restored for decommissioning and which sections of road would remain in place (e.g., Putnam Road, Sleepy Hollow Road, and GMP access road). Deerfield shall provide these clarifications and shall provide a revised decommissioning cost estimate if warranted.”

Deerfield provided a revised decommissioning cost estimate that replaces the cost of MET tower removal (\$7,400) with the cost of LiDAR station removal (\$5,000). The cost for tower dismantling and salvage preparation was increased from \$315,000 to \$450,000. The cost for foundation and transformer pad removal was increased from \$2,467 per turbine to \$5,000 per turbine. This revision brings this line item within the range for other wind projects that was provided by the Vermont Department of Public Service.⁴ The Department did not comment on the revised cost estimate.

The total decommissioning cost estimate with these changes is increased from \$1,877,400 to \$2,048,000. Deerfield also confirmed that pre-existing roads would not be removed as part of the decommissioning plan.

Based on these revisions, we determine that the revised decommissioning cost estimate fulfills the requirements of Condition 21 of the Amended CPG.

IV. CONCLUSION

We have reviewed the compliance filings made by Deerfield on February 22, 2016, and we have determined that the FAA Determinations previously filed by Deerfield satisfy the requirements of Condition 33 of the Amended CPG; that the revised blasting plan satisfies the requirements of Conditions 24 through 27 of the Amended CPG; that the stormwater permit

4. Department filing of 8/21/2015 at 2.

application materials, along with the stormwater permits previously filed, satisfy the requirements of Conditions 17 and 18 of the Amended CPG; and that the revised decommissioning cost estimate satisfies the requirements of Condition 21 of the Amended CPG.

SO ORDERED.

Dated at Montpelier, Vermont, this 29th day of April, 2016.

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

OFFICE OF THE CLERK

FILED: April 29, 2016

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

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

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