



Department of Health

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Executive Deputy Commissioner

August 26, 2016

Eric Miller
Bull Run Energy LLC
120 N. Lee Street
Falls Church, VA 22046

**RE: Case No. 15-F-0377: Preliminary Scoping Statement for the
Bull Run Wind Energy Center**

Dear Mr. Miller:

New York State Department of Health staff reviewed the Preliminary Scoping Statement prepared by Invenergy for the Bull Run Wind Energy Center, a 449 megawatt wind farm in the Towns of Clinton, Ellenburg, Altona and Mooers (Clinton County).

We believe that the attached comments developed by Department of Health Staff, pertaining primarily to potential public health concerns associated with the proposal, will assist in developing an application that will fully address the needs of the local communities and the public more generally.

Thank you for your consideration of these comments; we look forward to the applicant's response and to continued discussion on these important issues. Should you have any questions, please do not hesitate to contact me by email at Richard.Thomas1@health.ny.gov or by phone at (518) 473-1403.

Sincerely,

Richard Thomas
Assistant Counsel
Bureau of House Counsel

Cc: Honorable Kathleen H. Burgess
Service List

New York State Department of Health
Staff Comments on Preliminary Scoping Statement

- 1) The proposed Bull Run Wind Energy Center (“Bull Run”) would be one of the largest wind energy projects in New York State, and would be sited in Clinton County where a number of wind energy projects are already located. The application should include a discussion of the potential for cumulative effects (e.g., noise, vibration, visual, etc.) associated with the large number of turbines involved in the Bull Run project and considering the multiple wind farms already sited in Clinton County.
- 2) Exhibits 11 and 18 of the application will include present applicable lighting requirements and a lighting plan for the wind turbine structures. The Preliminary Scoping Statement (“PSS”) indicates that the night-time blinking of tower red lights (required by FAA) will be synchronized. The applicant should also evaluate whether there could be a benefit (in terms of reduced potential annoyance) from synchronization of blinking red lights with nearby existing wind farms. Also, given the scale of the project, the applicant may wish to explore the feasibility and safety of lighting only a subset of the turbine structures to reduce night time lighting impacts.
- 3) In evaluating public health impacts associated with wind turbine noise, the applicant will consider sensitive receptors defined as year-round residences, schools, hospitals, houses of worship, and outdoor public use areas. In the absence of a reasonable justification, the applicant should also consider noise impacts to seasonal residences located throughout the study area, some possibly located quite close to the turbines. Moreover, other potential safety and health impacts (including blade and ice throw, tower collapse, shadow flicker/visual impacts, drinking water wells, electromagnetic fields, etc.) should be considered for seasonal-residential locations in the study area, in addition to those locations identified in the PSS.
- 4) Exhibits 15 and 19 of the application will evaluate potential public health and safety issues and noise and vibration, respectively. It may be helpful to update the Noise Impact Protocol by considering information contained in a New York State Energy Research and Development Authority report which explored the current knowledge and research needs associated with wind turbine noise and health effects, including annoyance, sleep disturbance and other health effects.¹ Additionally, we request that the applicant compare modeled noise impacts to the World Health Organization’s (WHO) health-based noise guidelines, including WHO’s night-time noise guidelines to protect from sleep disturbance which can adversely affect health.²

¹ New York State Energy Research and Development Authority, *Wind Turbine Noise: Current Knowledge and Research Needs* (June 2013) available at <http://www.nyserda.ny.gov/-/media/Files/Publications/Research/Environmental/Wind-Turbine-Related-Noise.pdf>

² World Health Organization, *Night Noise Guidelines for Europe* (2009) available at www.euro.who.int/en/health-topics/environment-andhealth/noise/publications/2009/night-noise-guidelines-for-europe.

- a. The Noise Impact Assessment Protocol indicates that pre-construction noise measurements will be conducted at six locations throughout the study area. It is not clear whether six noise monitoring locations will be adequate to characterize ambient pre-construction noise levels across the full range of possible relevant locations throughout the large study area. Please describe how the choices of monitoring locations (e.g., proximity to other noise sources) could impact conclusions about facility noise impacts and provide some justification for limiting the proposed monitoring to six locations.
 - b. Additionally, this section should clearly define the metrics presented (e.g., Leq, L90, L10) in the Noise Impact Protocol and describe how applicable noise guidelines will be compared to these modeled and measured metrics.
- 5) The PSS states that potential Environmental Justice (“EJ”) communities, as defined and identified by the New York State Department of Environmental Conservation, are not present within a five mile-buffer from the locations of the project area (the “study area”). The applicant should present a map of potential EJ communities in Exhibit 28 to support this assertion.
- 6) The PSS indicates that applicant will minimize potential temporary impacts related to construction of the facility by implementing a quality assurance and control plan, hiring an on-site environmental monitor and implementing complaint resolution. The plans should also include mechanisms to minimize noise associated with construction and to prevent traffic accidents associated with transportation of construction-related materials. Additionally, the application should explore approaches to minimize or control emissions from any on-site construction facilities (e.g., a concrete batch plant, if required by the project) and equipment.