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Martha's Vineyard Commission
P.O. Box 1447
Oak Bluffs, MA 02557

October 28, 2016

Subject: DRI# 660- Oak Bluffs Water District, Solar Farm

Dear Commissioners:

Between 2013 and 2014, I was involved in the environmental assessments for the Oak Bluffs Water District's (OBWD) proposed development of a photovoltaic solar energy project at their property located at 4 Alwardt Way. My initial involvement was to review and assess the wildlife habitat concerns relating to this Site. Applied Marine Ecology Lab (AMEL), acting on behalf of the OBWD, communicated with the Mass. Division of Fisheries & Wildlife (MF&W). As part of that communication, AMEL was provided with a Massachusetts Endangered Species Act (MESA) tracking number (14-33278) to be used to identify this project during their review process. Further, AMEL confirmed the Natural Heritage Endangered Species Program (NHESP) database designation of the 4 Alwardt Way property as Priority Habitats for threatened and species of special concern.

Approximately 56.32 Acres of the OBWD property (Assessor's Map # 54 Lots 1 & 2) are identified by NHESP as Priority Habitat for several species of moths and beetles. Their status as Threatened and/or Special Concern is based on potential loss of habitat caused by alteration of the existing conditions. While none are listed as "Endangered" and none have Federal Status, NHESP required submission of a MESA Project Review Checklist in order to determine any mitigation measures to protect this habitat. AMEL completed this effort and it is my understanding the results of this investigation led to a "no take" determination by MF&W.

In January of 2014, I was contracted to undertake a Phase I Environmental Site Assessment as compliance with MGL Ch. 21-E. This work involved a detailed review of the historical property uses, evaluation of potential adverse impacts from oil & hazardous materials resulting from existing OBWD operations and possible effects from surrounding areas. As this Site is located within both Zone I and Zone II groundwater designations, particular attention was given to the potential adverse impact to the underlying water quality of the OBWD's well field.

Historically, until OBWD's development as a well field for public water supply, Registry documentation indicates the Site has never been commercially developed, was in private ownership for more than a century and used as a "wood lot" to periodically harvest firewood for

fuel. It is not a virgin “old growth” forest. Interviews with public officials including Building, Health, Fire, Clerk, Assessor, Conservation Commission and OBWD, indicated no environmental issues with this Site. Conclusions of our 21-E report stated:

- Groundwater is more than 35’ below existing grade and movement under this Site is not known to have contaminants from up gradient sources.
- There is no evidence of direct exposure, any known exposure pathways and no direct environmental receptors relating to this Site.
- This Site is a licensed municipal water supply system.
- Based on AMEL’s investigations, there is no indication of any soil or groundwater contamination subject to MGL Ch. 21-E.

AMEL opinion

Clearly, forested woodlands are shrinking throughout the Island and there is a need for preservation and protection of these valuable resources. While development (agriculture, residential and commercial) accounts for a significant percentage of the loss of forest habitats, it is not the only reason for the demise of our forests. Historic mismanagement of the State Forest resulting in wide areas of disease within these undeveloped woodlands accounts for a significant loss of potentially productive habitat. However, the most serious adverse impact to the Island’s forest habitat is caused by off-Island anthropogenic activities resulting from fossil fuel generation of electricity. The resulting air pollution of the atmosphere causing “acid rain” participation continues to threaten the entire Island ecosystem. Legislative mandates requiring inclusion of alternative (solar) energy is a realistic alternative presently available to the OBWD at this Site. Evaluation of accurate environmental and economic cost-to-benefits need to be included in the decision making process. The cost off-Island electricity has risen approximately 30% over the past year and not likely to go down.

OBWD is a quasi-public entity responsible for providing safe drinking water to the community. The very idea that their proposed alternative energy (solar) efforts are somehow misplaced and/or ill-conceived is incorrect. An elitist NIMBY attitude that this is a good project at the wrong location fails to understand the entire ecological interdependence of all organisms within their environs. The residents of Oak Bluffs are an essential part of this complex equation. OBWD operates within strict regulatory guidelines. The cost to provide their services is born by their rate payers. OBWD does not enjoy the luxury of generating off site electricity from inner city roof tops or contaminated “brown fields as some would suggest. The transformation of less than 10% of the OBWD’s woodland property at this Site to accommodate a modest solar energy system overlying their well field is an appropriate mixed use of the OBWD’s available resources. The required infrastructure for the proposed solar energy system already exists. Carefully regulated and managed development and operation of a proven non-polluting alternative energy

supply that will offset the operating cost of the OBWD requires serious consideration. There is no evidence that underlying groundwater will be impaired by the construction or operation of a modest “solar farm” at this Site. In fact, the replacement of existing trees and understory vegetation with appropriate grasses will contribute to the conversion of atmospheric nitrogen improving the overall underlying groundwater quality. A simple comparison of the “carbon footprint” produced from off-Island electricity with that generated by an onsite source indicates the proposed OBWD system is approximately 90% less than the existing electric grid provides.

Finally, rejection of this project will send a negative message to all contemplating alternative energy efforts. It is imperative that government encourage and promote alternative (solar) energy as a means of diversification in the overall production of electric energy.

Respectfully submitted by:

Joseph M. Forns

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