## **Paul Foley**

From: Wayne Klug [wklug@yahoo.com]
Sent: Friday, March 08, 2019 2:40 PM

To: Paul Foley Cc: Wayne Klug

Subject: Submission into the public record re. DRI 688 - Vineyard Wind Undersea Cable

## To members of the Martha's Vineyard Commission:

As a 40-year seasonal visitor to Chappaquiddick, I'm a member of the Sierra Club, a renewables advocate, and a residential consumer of solar energy. At my college, I've served as MassPIRG faculty advisor for two decades and co-created the school's recycling program, this year ranked the most effective college program in Massachusetts and 4th most effective in the nation.

These are the 'green' credentials I invoke in raising a caution about industrial-scale wind energy—alone among all of the alternatives. Since the underwater cable your commission is currently reviewing may be the portal for the most significant offshore wind development in the United States, I trust you will accept these comments as relevant and timely.

The attractive and comforting image of majestic wind turbines turning gracefully against the sky, generating clean, limitless energy—seemingly all benefit and no cost—begins to tarnish as we learn about particulars that neither wind developers nor government agencies have so far preferred to discuss.

For example, we've learned about the fragmentation of wildlife habitat by miles-long stands of 50-story turbines whose sound and strobe effects, like giant scarecrows, drive away most species, while achieving an alarmingly high rate of outright bird and bat kills.

We've learned about the turbines' high-frequency noise—and its inaudible low-frequency counterpart, called 'infrasound'—that creates headaches, vertigo, and elevated blood pressures among humans living within sight and sound of them.

We've learned about an accumulating number of such accounts from residential areas as far-flung as western Pennsylvania, northern Maine, Denmark and New Zealand, and we've learned of studies confirming this cluster of symptoms—dubbed 'wind turbine syndrome'—by physicians and researchers working independently in New York and Australia, and on the staffs of a Swedish university and of Minnesota's Department of Public Health, among others.

We've heard about once-rural, now-industrialized, landscapes, of particular concern in areas of natural beauty whose economies, like those of the Cape and Islands, depend on tourism. We've heard about turbine-induced forest fires and ice-throws of a half-mile, once responsible for the closing of a parking lot at Massachusetts Maritime Academy, where windshields were being smashed by thrown ice. We've heard about declining property values and even abandoned homes that no one will buy.

And—the kicker, from a policy point of view—we've heard about the undependable and intermittent nature of wind-generated electricity, requiring back-up from conventional power plants ramping up and down to meet fluctuations in wind supply, and therefore releasing, in some cases, more carbon into the atmosphere than they do when running at an even rate.

Finally, we learn that, despite a proliferation of wind plants in Europe and Asia, and a growing number in the U.S. and Canada, no conventional power plant has yet been taken offline on their account, on any continent.

Disillusionment sets in; the picture begins to look like all cost and no benefit. If that picture is correct, then as 'regional impacts' go, this one is substantial. The jury may still be out on this question, but as the MVC is now part of that jury, I urge you to learn as much as you can about the details I've only touched on here.

Thank you for this opportunity to testify.

Dr. Wayne Klug

P. O. Box 830 Lanesboro 01237