

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

**Petition of BNE Energy Inc. for a
Declaratory Ruling for the Location,
Construction and Operation of a 3.2 MW
Wind Renewable Generating Project on
New Haven Road in Prospect, Connecticut**

Docket/Petition No. 980

February 14, 2011

Prefiled Testimony of Vincent Ricci

1. Please state your name and address for the record.

My name is Vincent Ricci. I live at 12 Woodcrest Drive in Prospect, Connecticut.

2. How far is your home from the proposed industrial wind turbine site and how long have you lived there?

My home is approximately 2,500 feet due east from the proposed towers. I have lived at 12 Woodcrest Drive for 44 years.

3. What is your educational background?

I have a B.S. in Chemistry from the University of Rhode Island and an M.S. in Analytical Chemistry from the University of Connecticut.

4. What is your work background?

I worked for 37 years for Uniroyal Chemical Company in Naugatuck and Middlebury, Connecticut.

5. Do you have any teaching experience?

From 1972 to 1984, I taught General Chemistry, Drug Chemistry and Environmental Chemistry at the University of New Haven, Evening Division, while I was employed with Uniroyal.

6. Have you done any study and investigation with respect to BNE Energy's Petition 980 within your field of expertise?

Yes. I have reviewed the Brownfields Targeted Site Assessment Report for the U.S. Cap and Jacket Site, Prospect, Connecticut, conducted by Tetra Tech NUS, Inc. under EPA Contract No. 68-W6-0045, exhibits, and related materials (the "U.S. Cap and Jacket Report"). These materials include a letter to Mayor Chatfield from the State of Connecticut, Department of Environmental Protection dated January 6, 2003, in which Stephen J. Gaura, a DEP Environmental Analyst advised Mayor Chatfield that the former U.S. Cap and Jacket site "has been found to be grossly contaminated with industrial chemicals from the misuse and mishandling of wastes." The letter further advises that the DEP "is concerned that any newly developed drinking water wells in at least a one-half mile radius of the site be tested for chemicals that have been discovered at the site, i.e. volatile organic compounds (VOC's) along with any other testing required by law.

I have reviewed the U.S. EPA web site summary of the Brownfield site identified as U.S. Cap and Jacket, Prospect, Connecticut, Site ID# 0103149 0103043. This document describes the site as a 5.1 acre parcel with a 21,116 square foot, abandoned one-story industrial building. The history of the site as reflected in this document states that it was formerly occupied by a screw machine manufacturer whose processes included machining, degreasing, tumbling and bright dipping in nitric acid solution baths. The document further reflects that in December 2000, EPA's Superfund Program "conducted a site investigation and documented numerous areas of solvent contaminated soil and several underground storage tanks that contained solvents." The EPA conducted a short term cleanup of the site that "excavated 300 tons of solvent contaminated soil

and removed four underground storage tanks,” shipping 2,500 gallons of solvents off the site for disposal.

I have also reviewed the records collected and maintained with respect to monitoring and testing of a nearby residential well that was found to be contaminated with industrial solvents. One of these contaminants, a suspected human carcinogen, was found to be at more than ten times acceptable levels. A preliminary site assessment included an analysis of soil, groundwater and surface water samples that “indicated the presence of polluting substances on the site and adjacent properties,” including VOC’s, pesticides, and metals.

The U.S. Cap and Jacket Report states that groundwater samples collected from the bedrock aquifer at two on-site drinking water wells and the private water well at 213 New Haven Road “provide evidence that VOC’s in shallow groundwater have migrated to on-site and downgradient bedrock aquifer.” The U.S. Cap and Jacket Report also reflects groundwater depth measurements at the site which measured depth to groundwater “at approximately 0.5 feet below ground surface (bgs) . . . to 13 feet bgs,” with the direction of groundwater flow being to the northeast. Located directly to the northeast of this contaminated site is a residential area, including the home noted as having a contaminated private water well and the other homes in the neighborhood of Prospect known as “The Hill,” where I and a number of other witnesses testifying in these proceedings reside. I am aware that a number of wells in the neighborhood currently are required to use a filtration system because of contaminants in their well water.

The U.S. Cap and Jacket Report identifies potential pathways by which the VOC contamination could migrate and states that the VOC contamination “may have entered the bedrock aquifer either by migrating downward through fractures in the till layer or by following

preferential vertical pathways created by the two on-site drinking water supply wells.” The report further identifies the stormwater drainage system as potential influence on the VOC migration.

7. What substances are the most significant areas of concern in terms of public health risks, in your view?

Areas of concern are: (1) halogenated organic compounds (which includes VOC's); (2) radon; (3) total coliform bacteria; (4) metals, including chromium, copper, thalium and vanadium.

8. What concerns do you have relating to these issues with regard to the proposed construction and operation of industrial wind turbines by BNE at the adjacent site directly to the north of the U.S. Cap and Jacket Superfund site?

So far as I am aware, BNE's petition filed with the Siting Council does not consider these issues and the risks that they may present. The U.S. Cap and Jacket Report specifically identifies the direction of the path of migration of the contaminants at that site as being to the north and east. It identifies a contaminated well in the adjacent community, which is part of my neighborhood. The U.S. Cap and Jacket Report further specifically recommends closing the two on-site residential wells, because their penetration of the surface soils and fracturing of the bedrock may represent a preferred pathway for further migration of the contamination and recommends closure of the on-site septic system as representing a further potential threat to public health and safety.

BNE's petition contains no detailed information regarding the construction methods intended to be used, the depths of the footings or other anchoring mechanisms for the turbine towers, or whether blasting will be required. There is no evaluation of the potential effects of these activities with respect to the potential migration of contaminants from the grossly

contaminated adjacent U.S. Cap and Jacket site to other properties. Similarly, there is no evaluation of the potential effects of operations of the industrial wind turbines, including vibration and other disturbances that may be caused by maintenance activities.

Based upon my knowledge of the contaminants found as the U.S. Cap and Jacket site, the migration of these contaminants to adjacent properties, and the health risks presented by the contaminants, including VOC's, radon, and metals found at the site, I respectfully submit that it would be irresponsible to allow construction of the industrial wind turbines proposed by BNE to commence without a prior thorough investigation and evaluation of these risks. The drinking water analysis should include tests for several halogenated organic compounds, radon, total coliform bacteria, several metals (chromium, copper, vanadium, and thallium) and standard water quality tests, such as color, turbidity, pH, hardness, and nitrates. The specific halogenated organics and metals to be tested are those found by the EPA/DEP in previous testing to be present in either the soil or drinking water on the site and in an adjacent residence. Further, the residential wells in the surrounding area should be tested to establish their baseline condition and further tested periodically, if and when construction is permitted, to determine whether there are any deleterious effects.