From The Western Slope Of The Mountains by Frank Young

There's Gold in the Winds over them there Hills

"I just love that mountain air", we often hear people say.

But is that "mountain" air different from the Kanawha and Ohio Valley air? Yes, the West Virginia "mountain" air includes some of the air from the western valleys laden with smoke and invisible chemicals and particles from the valleys' coal burning power plants, chemical plants and smaller air fouling industries.

But the mountain air we so crave is mostly mixed with air blown across the continent, usually from the north and west, on high level "jet stream" winds, blowing from afar. These jet stream winds blow at speeds beyond 100 miles an hour at higher altitudes- 25,000 to 30,000 feet. At the level of the West Virginia "highlands", approximately 3500 to almost 5,000 feet, these winds, though reduced in speed, still are often quite brisk.

That the winds move is an indication of energy. The faster the winds blow, the more energy they contains. And our human society is constantly clamoring for more and more energy- to run the wheels of industry and to light homes, stores, industrial facilities, and even to light the great outdoors during hours of natural darkness.

Energy is in demand. Therefore harnessed energy has value. The winds of the WV highlands, when harnessed, are valuable. And the technology revolution of the 20th century has revolutionized the ability of mankind and machines to capture and harness the energy in the wind. Enter the age of commercial wind power.

We are familiar with the images of quaint little wind mills used long ago to mechanically pump water from here to there, or to power a grain mill located adjacent to the energy converting wind mill. But like Henry Ford's Model T, those quaint little windmills are mostly relegated to the pages of history. Today's "wind mills" often stand higher than the tallest electrical power transmission line support towers. Some are taller than the length of a football field. Giant rotating blades whirl and swish in the sky on the highest mountain ridges. Why there? Because usually that's where the wind blows strongest.

We are the West Virginia *Highlands Conservancy*. Our name suggests that we seek to *conserve* the mountain regions- presumably in their nature state. That means that we promote low impact, "sustainable" uses of the natural resources there. In doing so we encourage hiking, bicycling and a reasonable level of tourism and modest commercial and human habitat infrastructure and institutions. We discourage mountain strip mining, excessive logging of trees, unneeded highway corridors, water resource degradation and ugly intrusions upon nature.

The recent interest in constructing wind power towers and turbines, made relatively economical through technological achievements in electronics, plastics, and metallurgy, as well as governmental economic incentives, creates a dilemma for the WV *Highlands Conservancy* and other conservation advocates.

Theoretically, wind generated electricity can replace that generated by mining and burning coal and other fossil fuels, avoiding the need for those processes. At first glance we are tempted to say, "Great! Clean power at last!"

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Second thoughts, though, give us pause to think about potential problems with wind generated electrical power, too. Do wind turbines create significant bird mortality hazards? Do they impact the habitats of endangered species? Do large wind turbine and tower assemblies, and their associated "aviation warming lights", mar majestic viewsheds? Are these impacts significant enough to warrant discouraging wind power development? Can these, and perhaps other potential problems, be mitigated and still keep wind power economically viable?

Today, as I write this, I am informed that US WindForce of Wexford, Pennsylvania, and Padoma Wind Power of La Jolla, California are forming a joint venture for the purpose of developing, constructing, financing and selling as many as 1500 MW of wind energy projects, involving 10 or more project locations, over the next 5 years in the Mid-Atlantic region of the United States, including West Virginia.

That equates to from between 1000 and 1500 tower-turbine assemblies on mountain ridges. And on this same day I am informed of a pending permit application for a 600 Megawatt coal fuel electrical power plant near Morgantown, WV. The march to supply more and more energy goes on.

Will wind power be the yearned for alternative to fossil fuel extraction and burning and the associated environmental detriments? Or will wind power simply be an added source for the nation's seemingly insatiable appetite for more and more "cheap" energy?

Can we ask and answer these and other related and important questions rationally, avoiding knee-jerk attitudes and reactions?

How should the West Virginia *Highlands Conservancy* approach wind power issues in the West Virginia highlands? One of the WV *Highlands Conservancy*'s good friends recently cautioned against "squandering our good name" in challenging the wind power industry to make marketed "green power" really green.

So far our approach on this has been on a project-by-project basis. Two years ago we successfully challenged a mostly naked "green" wind power project on Backbone Mountain in Tucker County. We successfully negotiated with Backbone Mountain Windpower to move the proposed 65 tower-turbine project from the viewshed of the Blackwater Falls State Park lodge. We also negotiated an agreement whereby the West Virginia *Highlands Conservancy* can be part of a technical committee to help monitor and make recommendations on wildlife impacts of that project.

Now we are trying to decide to what degree to engage with the project developer and the permitting state agency on a proposed 200 turbine wind power project on the Allegheny Front in Hardy County. This project may have a significant viewshed impact on the Dolly Sods North recreation area, as well as some possible migratory bird impact. We are trying to learn more about this project.

I am becoming concerned about the costs and inefficiency of WV *Highlands Conservancy* trying to keep track of and act defensively on each separate wind power project- especially as it appears that these projects will be coming along quickly in the next few years.

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The West Virginia Public Service Commission (WVPSC) issues permits for wholesale wind power electricity generating projects. However, WVPSC is not primarily an environmental agency. Rather, the WVPSC traditionally has limited its analysis of utility infrastructure and power generating facilities to need, supply and cost considerations. I propose that WVPSC should develop, as apart of a universal application process, a full environmental assessment of electrical power generation projects, and help to develop effective mitigation of viewshed impacts and other impacts on nature.

In any event, we need to have the discussion about how we will relate to ongoing and the many future wind power generation facilities that are certain to be forthcoming soon. In a separate article in this issue of the Highlands Voice, Peter Shoenfeld writes about the pending Allegheny Front wind power project. We are starting to have the discussion. We need to continue and expand the discussion.

To ask to be on our wind power energy committee, contact me as indicated on our page 2 roster. To offer your views, brief or extended, in the *Highlands Voice*, write to Editor John McFerrin.