

I am, and expect to remain, a member and supporter of New Hampshire Audubon. However, regarding the question before this committee I respectfully, and regretfully, disagree with the position of New Hampshire Audubon, and I wish to speak in favor of the Antrim Wind project. I understand the concerns over the impact of the wind turbines, but I feel that the need for clean, renewable energy is of critical importance. With the carbon dioxide level in the atmosphere at 400 parts per million and rising, I am troubled by the lack of urgency in dealing with what I take to be a daunting challenge to the welfare of all our people. In the overall scheme of things, the Antrim Wind project is small, but it is a constructive step in the right direction. If we are to put an end to our dependence on fossil fuels, we desperately need more wind projects, more solar installations, more small-scale hydro, better ways of storing power and improved efficiency in the way we use it. We need to meet these goals quickly. Lester Brown, author of Plan B, feels that it will require an effort at least on the scale of what this country did in World War II to effectively deal with the problems that confront us. I think he is correct.

Last year, we thought we had good news from the outcome of the Paris Climate Talks. We were told that if the adopted proposals were ratified, we could expect that the increase in the average global temperature would not exceed 1.5 degrees Celsius by the end of the century. What was not generally understood is the fact that, in order to meet the proposed standards, the coal-burning plants would have to capture and sequester the carbon dioxide emitted by their combustion. The fact is that we do not have a practical method of capturing and storing the carbon dioxide, and we do not have a satisfactory method under development or in prospect. This is documented in numerous places including the January issue of Scientific American.

We should be aware that more than 25% of our output of carbon dioxide has gone into the world's oceans. We have warmed the oceans and changed their chemistry to the point where our coral reefs may not survive. This has ominous implications. Over the past several decades, the amount of sea ice in the Arctic has declined precipitously. The open water does not reflect the sunlight as the ice did and the increase in warming is substantial. In addition, the permafrost is melting, releasing large quantities of methane which is a more potent heat-trapping gas than carbon dioxide. This is a self sustaining, positive feedback condition that is frightening. If the Greenland Icecap melts in its entirety, the sea level will rise by twenty feet. That could provoke the greatest refugee crisis in human history.

The world population is now in excess of seven billion people, and even with improved education and more emphasis on birth control, it will exceed nine billion before it can begin to be leveled off. At the present time, our demands on the earth exceed the capacity of the planet. It has been calculated that a planet more than one and one-half times the size of the earth would be required to sustain our current demands.

Natural gas is suggested as a temporary substitute for coal. While the combustion of natural gas is cleaner than that of coal, it has been shown that the total gas leakage, from well head through combustion, must be held to about 3% if any real improvement over coal is to be realized. Our experiences at Aliso Canyon in CA and Eight Mile in Alabama show that we are not now adequately controlling our leakage.

Many people understand that our present practices are not sustainable but they think, or hope, that serious problems are far in the future. They are not. Our own young people, alive today, will find it difficult to deal with the problems we have created. That is simply unfair. Every day that we delay in reducing our dependence on fossil fuels means that the damage will be greater. In the book Tipping Point for Planet Earth, Anthony Barnosky and Elizabeth Hadly project that we have from ten to, at most, twenty years to get our energy problems under control before the window of opportunity closes and events simply spiral out of our control. I feel that we are playing Russian Roulette with the welfare of our young people. If we do not face up to our responsibilities, they will judge us harshly, and we shall deserve their contempt.

Many knowledgeable experts believe that, if we have any hope of achieving the goal of limiting the global temperature increase to 1.5 deg. Celsius, our emissions must peak by 2020. That is only four years away and seems unlikely to be achieved. We are now emitting approximately 52.7 giga tons of carbon dioxide and other greenhouse gases per year. That puts us on track to an increase in global temperature of at least 3 degrees Celsius. That is a pathway to disaster. If we accept a temperature increase of 2 deg. Celsius, we still must find a way to reduce our emissions by 12 to 14 giga tons per year. That is a monumental challenge which becomes obvious if we recognize that one giga ton is the equivalent of taking all European vehicles off the road for one year.

Finally, I am afraid that the impact of global warming on the Willard Pond area and the nearby ridgeline will be far more severe than anything the wind turbines will do. Climate change will affect the trees, the wildlife, insect infestation, invasive species and much more. Scientists like E.O. Wilson have warned that attempts to save small, specific areas will not be successful. We must try to save as much as possible, and we must learn to live in harmony with the limitations of the planet so future generations will have the same opportunities we have enjoyed.

Antrim Wind is projected to produce 94,000 megawatt hrs. of electric power per year. That would amount to 1,880,000 megawatt hrs. over a 20 year period, enough to supply more than 12,000 homes. Unless we know that there will be a surplus of clean, renewable electric power available over that same period, I do not see how, in good conscience, we can deny this application.

I hope you will approve the application for the Antrim Wind Project.

Respectfully, Benjamin Pratt