

March 25, 2008

To: Mr. James E. Rogers, Chairman, President and Chief Executive Officer, Duke Energy
From: Jim Hansen, Columbia University Earth Institute
Subject: A Plea for Cooperation and Leadership

Dear Mr. Rogers,

I was glad to see you attend my talk on climate change in Charlotte last November. I write to inform you of progress in understanding of human-made climate change and the challenge it poses for those, such as yourself, who are charged with providing the public with essential energy. I know you aim to do that in a way that protects the long-term interests of people and nature, so I end with a proposal for cooperation in defining potential alternative actions.

Mr. Rogers, the challenge is greater than we thought just a few years ago. The attached paper, "Target Atmospheric CO₂: Where Should Humanity Aim?," for example, makes clear that we have already passed the limit for CO₂ that we can allow to exist over the long-term. Mother Nature, as a friend of mine has noted, is wagging her finger at us: "Now you have gone too far!"

Consequences of ignoring this admonishment would be severe. The Earth is nearing climate "tipping points" with potential effects, many irreversible, including extermination of countless species, ice sheet disintegration and sea-level rise, and intensified regional climate extremes. A world filled with desperate climate refugees, we are warned by retired US generals and admirals, would be not only tragic, but dangerous for everyone.

One implication for electricity generation is crystal clear from basic fossil fuel facts (enclosure). Coal is the source of 50% of fossil fuel CO₂ in the air today, and, because of vast coal reserves, coal is the dominant issue for the long run. It is not rocket science. To maintain a safe planet, coal can be used in coming decades only if CO₂ is captured and sequestered. Coal-fired power plants built now without CO₂ sequestration will soon have to be shut down. They are a terrible, foreseeable waste of money. It would be a tragic mistake for Duke to proceed with plans for new coal-fired power plants in Cliffside, North Carolina, and Edwardsport, Indiana.

Your public statements recognize the climate problem and indicate a desire to do what is right for the environment, the young generation, and your rate-payers. However, your suggestion that new, more efficient coal-fired power plants, which do not capture CO₂, can be part of a solution ignores the basic facts and urgency of terminating coal emissions. Dirty, inefficient coal plants must be replaced to avoid climate disasters, but only by choosing options from energy efficiency, renewable energies, nuclear power, and coal plants that capture all emissions, including CO₂.

Near-term demands for energy can be satisfied via a real emphasis on energy efficiency and renewable energies. Neither carbon sequestration nor nuclear power can help in the near-term, and they both have serious issues even over the longer term. But Massachusetts and California have demonstrated the tremendous potential of efficiency aided by appropriate incentives.

Plans for over 50 coal-fired power plants nationwide have been dropped in recent months due to rising construction and coal prices, unpredictable carbon costs, and concerns about climate change. Near-term energy needs can be met with massive but feasible conservation and efficiency programs, cogeneration, solar, wind, and biomass generation. Diversifying generation has other benefits -- creating jobs, conserving water, and minimizing the possibility of terrorist acts against the grid, about which former CIA Director James Woolsey recently warned the National Governors' Association.

Recently I testified as climate expert in suits filed by the automobile manufacturers against vehicle greenhouse gas regulations in California and Vermont. The manufacturers lost both cases, and

they are going to be scrambling to improve vehicle efficiency. As you know, another suit has been filed, on behalf of the Inuit of Kivalina, against EXXON/Mobile, Duke Energy, and others who bear special responsibility for the emissions that drive climate change.

It appears that energy industry leaders may be choosing a path analogous to that taken by Big Tobacco when it first became clear that smoking caused serious health problems. Tobacco companies manufactured and magnified public doubt about scientific evidence; they masqueraded PR as news and expert opinion; they emphasized maintaining “balance” in a “controversy”, and they supported doctors and scientists who disputed the evidence, thus proclaiming concern about discovering the truth while actually suppressing it.

Big Tobacco’s playbook proved a great “success”. Tobacco profits were so great that court settlements could be paid with hardly a blip on stock values. Can it be any wonder that Big Coal and Big Oil have stolen Big Tobacco’s playbook?

Mr. Rogers, as a leader in the Electric Power industry, your decisions will affect not only energy bills faced by your customers, but the future planet that your children and grandchildren inherit. If you insist that new coal plants are essential for near-term power needs, you may submit your company and your customers to grave financial risk, and leave a legacy that you will regret.

Scientific evidence of human-made climate change has crystallized, and it has become clear that continued emissions carry great danger. These facts fundamentally change liabilities. And liabilities will be increased by any “success” of industry efforts to confuse the public about the reality and likely consequences of human-caused climate change and to promote false “solutions” such as new “cleaner” coal plants.

Surely the number of people pressing these legal cases will grow, and they will be inexorable in pursuing justice. And assuredly, in the long run, the energy companies will lose the legal battles. Unfortunately, although the public will ultimately hold polluters accountable, it will not necessarily be soon enough or have enough impact to prevent environmental and human disasters. It may drag out as in the tobacco case, but with much more serious consequences.

Mr. Rogers, this is a path that, for the sake of our children and grandchildren, we cannot follow. Enlightened leadership is desperately needed in planning our energy future. As a captain of industry, you can help inspire this country and the world to take the bold actions that are essential if we are to retain a hospitable climate and a prosperous future. I am reaching out to you, Mr. Rogers, because you are uniquely positioned to influence others in your industry, and because your statements suggest that you comprehend the gravity of the problems we face.

I suggest that, to assist your considerations, we have a one-day discussion with top experts in the country in energy efficiency, renewable energies, clean coal with carbon capture, and nuclear power. The aim would be a realistic assessment of potential and timelines, with quantitative assessment of climate implications and identification of practical constraints. I can arrange a meeting here, at Columbia University, and would seek your advice on participants. Because these matters are urgent, I propose that we meet within the next 2-3 months. Would you please call me at 212-678-5500 at your convenience to discuss your availability for a meeting?

Sincerely,

James Hansen

cc: Duke Energy Board of Directors
Governor Michael Easley
Governor Mitch Daniels