NC WARN & The Climate Times

December 10, 2015

Lynn J. Good President and Chief Executive Officer Duke Energy Corporation 550 South Tryon Street Charlotte, North Carolina 28202

Subject: Contesting Duke's fracking gas future as disastrous for climate and economy

Dear Ms. Good,

Since our October 20 letter to you, we have done further research into the rapidly emerging issues crucial to Duke's proposed reliance on natural gas. We are even more convinced that a transparent examination and debate over these issues will lead to rejection – by government officials and the public – of Duke Energy's plans to build the equivalent of up to 15 large gas-fired power plants in the Carolinas by 2030, its proposed acquisition of Piedmont Natural Gas and its investment in fracking gas pipelines.

News coverage of the Paris climate negotiations includes recognition that climate disruption is already causing great harm, that the very future of humanity is at stake, and that dramatic carbon reductions must begin immediately. However, the issues of methane leakage and the poor economics of natural gas are only beginning to emerge as death-knells for the U.S. fracking gas industry and electricity providers that bank on gas.

With the enclosed white paper, we share with you and the public what we are learning from government data and independent technical experts. We urge you to reconsider your plans before locking in gas-expansion efforts that seem doomed to failure unless science and economics are totally subordinated to corporate power and distortion of debate. Among the recent developments:

1. Methane, the dominant component of natural gas, has a global warming impact 100 times that of carbon dioxide over its initial 10 years in the atmosphere, and a large amount of it is leaking from conventional and shale gas wells. In order to slow global climate change in the critical short term, it is essential to immediately begin to greatly reduce the amount of methane being released into the atmosphere.

- 2. Estimates of natural gas reserves in the U.S. are overstated by at least 50%, so future supplies might not be available, leading to fuel shortages and price spikes.
- 3. There is evidence that the shale gas industry is based on a financial bubble because revenues do not cover costs of production. Fracking companies continue to lose money, risking stranded investments that could devastate utilities and customers.

We realize that Duke Energy might have been misled by the natural gas industry about these problems, just as the public has been inundated with the hype about "clean" natural gas providing "energy security." Until just a few years ago, many of us thought natural gas might genuinely be a "bridge fuel" toward a truly clean and safe energy future. Even now, some environmentalists still don't realize that, as Cornell's Dr. Robert Howarth convincingly maintains, "Switching from coal to shale gas is accelerating rather than slowing global warming."

However, evidence of methane leakage began emerging in 2011, and the poor economics have been well-documented, though under-publicized, in recent years. Perhaps Duke Energy executives are in denial about these problems, hoping you can move ahead while finding the challenges aren't as bad as they seem – despite the evidence pouring forth. While there has been a steady effort by the gas industry to downplay methane leakage, the drilling industry has been unable to correct the leakage problems because much of the leakage occurs through the well casing during both drilling and production.

As for the economics, your predecessor Jim Rogers perhaps said it best in 2011 when he called fracking gas the "crack cocaine" of the electric power industry due to its cost volatility.

Despite increasing confrontation between Duke and nonprofits, it is more obvious than ever before that we are all in this together. We must face the hard truths openly and adjust our vision and actions as needed so that North Carolina rises to our duty to help preserve a habitable planet. We therefore reiterate our deeply held interest in working cooperatively to find solutions mutually beneficial to Duke Energy and the people of North Carolina.

Because Duke Energy has an abundance of generation capacity in place, there is no need to rush gas expansion decisions. To do so could cost Duke Energy shareholders and customers dearly through stranded investments and soaring fuel costs. That would further stain Duke's corporate image, leading to loss of control over public officials, loss of your monopoly-protected rate of return, and therefore loss of investor confidence.

THE PATH AHEAD

We recognize that the news about natural gas being even worse than coal in global warming potential over the next critical decades creates serious challenges for electricity providers, and for the public. Making a shift to clean, safe electricity cannot happen overnight nor will it be easy. We therefore urge you to realize that the public is your partner

in the decisions that gravely affect our wellbeing. Our organizations and a growing list of diverse allies will continue to assert that partnership role and duty.

It seems clear that we still must:

- phase out the large coal units without adding more gas-fired generation or wasting even more precious years and billions of dollars futilely trying to build nuclear plants;
- greatly add to Duke's plans to achieve only 4% renewables over the next 15 years;
- greatly add to Duke's similarly dismissed energy-saving programs along with combined heat & power;
- increase the use of your existing, large pumped storage facilities, which are perfectly suited to smooth out the variability of solar and wind power across the region; and
- deploy other energy storage options.

We reiterate our interest in helping Duke find the best ways to help expand distributed generation and competition instead of continuing to limit it.

Again, we call on you and other Duke Energy executives to participate in honest debate at this unprecedented juncture. Help foster clarity rather than half-truths. Start by responding in writing to this letter, and explain your position – and push back against our understanding – about the climate impacts and economics of a fracking gas future. Do so before commencing what promise to be major fights in the regulatory, judicial and public arenas over plans for the Asheville gas plant and other expanded gas infrastructure.

Unless prominent, independent scientists are badly mistaken, we are convinced that the people of North Carolina and other Duke Energy states will not go along with your plans for a fracking gas future. Will you join us in an effort to find common ground?

Sincerely,

Jim Warren

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