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Sent: Monday, December 04, 2006 10:33 AM
To: Planning; eblume@renewwisconsin.org; Hoffman, Jeanne; cherokeeemarsh@gmail.com; Niels Wolter; mvickerman@renewwisconsin.org; Sherrie Gruder
Subject: Cherokee Marsh development



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December 4, 2006

Re: Proposed Cherokee Marsh Development

To the Madison Plan Commission:

Thank you for providing an opportunity to discuss the proposed development along Cherokee Marsh. Because I will be away on business on December 4, I will not be able to speak at the public hearing scheduled for that evening. Hence, the written statement.

My name is Michael Vickerman, and I am executive director of RENEW Wisconsin, an organization of over 300 members that advocate a sustainable energy future through public policy and private sector initiatives. I also serve on the City's Sustainable Design and Energy Commission. These organizational affiliations notwithstanding, the views I will present are my own, reflecting 15 years' of experience as an energy professional.

First, I am pleased that an agreement was reached to scale back the physical footprint of this development.

The City's commitment to acquire the most sensitive portions of this property is commendable.

However, the City's land purchase will have little impact on this project's energy impacts, which are considerable. As reported in the Wisconsin State Journal last week, the first phase of this development will consist of 60 to 70 upscale single-family houses. The default option is to heat these dwellings with natural gas, a premium energy source that is being rapidly depleted in North America. Presently about 80% of the natural gas consumed in the United States is supplied by domestic sources, and 15% comes from Canada, which exports half of its output to the U.S.

(The remainder is imported from overseas.) According to the latest U.S. Geological Survey's estimates, we have only 10 years of proven reserves at present consumption levels, while Canada's Geological Survey estimates a mere eight years' worth of reserves. Is this a good time to be adding a slew of larger houses that are dependent on this shrinking fuel? I think not.

Upscale houses tend to be prodigious energy sinks. It takes a lot of natural gas to heat them in the winter, and a lot of electricity to cool them in the summer as well as run the home appliances year-round. The households that occupy these Parade of Homes-style often surround themselves with high-end, energy-hungry features such as home theater systems, in-floor radiant heating, wine refrigerators, electrically powered treadmills and other home exercise equipment, plasma TVs and centralized vacuuming stations. Between the energy used to operate these appliances and climate-control such spacious interiors, only a tiny fraction of it comes from self-replenishing sources like sunlight, wind, wood and the earth.

It is not an unfair characterization to think of these houses as energy parasites. The greater their numbers, the faster they draw down the host planet's finite supply of high-density energy like oil and natural gas. Their considerable energy appetites depend on a

system of power plants, drilling rigs, substations, gas pipelines, and transmission lines that have considerable impacts of their own, but they are felt somewhere else, away from Cherokee Marsh. When more of these energy sinks are built in Madison and in surrounding Dane County communities, they strain the existing energy delivery system, leading to more transmission lines and pipelines, as well as faster depletion of premium fuels like natural gas.

We have gone past the point where we must, both as individuals and communities, take responsibility for the extraordinary amount of fossil energy that is wasted under our present living arrangements. To my way of thinking, taking responsibility means building net zero-energy houses. (A net zero-energy house produces on-site all of the energy consumed by its

occupants.) Indeed, I would feel much more charitable about the Cherokee Marsh proposal if there was an effort to design energy self-sufficiency into these new dwellings. There is no reason why these houses can't be heated and cooled with the renewable energy captured on-site, taking advantage of sunshine falling on rooftops and the stored temperatures of the earth.

There is also no reason why highly efficient building envelopes and proper orientation can't be a feature in every one of these houses. Though these features cost money, the savings from living in a net zero-energy house will very quickly offset higher mortgage payments even if energy prices don't climb any higher, an unlikely scenario. Should conventional energy prices resume climbing as they did in 2005, a net zero-energy should produce positive cash flow to the purchaser, perhaps as early as 2008. Anyway, if there is one demographic segment that can afford to purchase net zero-energy housing without blinking, it would be those who can afford upscale living near Cherokee Marsh.

In my view the City of Madison has an obligation to all its citizens (and especially to those residences and businesses along the proposed 345 kV transmission line along the Beltline) to require new houses to capture a portion of the thermal and electric energy they use on-site. Given the considerable energy impacts from allowing the Cherokee Marsh development to go forward in a business-as-usual manner, the City ought to initiate such a policy there, before ground is broken.

Respectfully submitted,

/s/ Michael Vickerman

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When you have to classify the very capacity of the Earth to support life as an "externality", then it is time to rethink your theory.

--Herman Daly--