

258 Main Road
Montgomery, MA 01085

April 23, 2007

Joint Committee on Telecommunications,
Utilities, and Energy
State House
Boston, MA 02133

RE: House Bill 3965 – The Green Communities Act of 2007

Dear Committee Members:

In general, I applaud the effort to promote energy conservation and clean, renewable energy. But I have four major concerns with the proposed bill as written, as explained below.

First, the idea of including construction and demolition (C&D) wood in eligible biomass fuel is ill-advised. I strongly oppose any legislation or changes to the Renewable Portfolio Standard (RPS) that would reward the burning of C&D wood in power plants. C&D wood contains lead paint, solvents, glues, wood treating chemicals such as copper-chromium-arsenate and pentachlorophenol, and other hazardous chemicals. Many of these chemicals end up in air emissions or in ash that must be placed in a lined landfill.

I am a registered professional environmental engineer in three states, with a Ph.D. in Civil Engineering and over 20 years of experience working on issues of environmental contamination. I have also studied sustainable design and passed the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Accredited Professional examination, so I am familiar with alternative, non-petroleum-based methods of obtaining energy. I am a strong proponent of energy conservation and alternative energy sources that are safe for human health and the environment.

Recently, I have been studying in detail available information on the environmental impacts of burning C&D wood in the Northeast. I have found no information that demonstrates that burning C&D wood is safe. The information that does exist is disturbing and indicates that there is nothing “green” about burning C&D wood. For example, a comparison of twin facilities in Maine (same size, same equipment, same owner/operator, and same age), one that burns only forest biomass and another that burns a mixture of forest biomass and C&D wood, indicates that the C&D burning plant emits higher quantities of all 21 air toxics for which there are data. In addition, the C&D burning plant emits four times the total quantity of air toxics as the forest biomass plant. I have reviewed stack test reports for C&D burning facilities, which show that they release significant quantities of arsenic, dioxin, lead, and other hazardous materials. Other information reveals how difficult it is to control fuel quality and keep out unwanted materials. In addition, two facilities currently burning C&D wood in Maine are among the largest point sources of the highest priority air toxics in Maine, including acrolein, polycyclic organic matter, manganese, benzene, lead, dioxin, arsenic, mercury, chlorine, and hydrochloric acid. As if that were not bad enough, the facilities currently burning C&D wood in Maine have had serious and persistent air permit violations, with minimal enforcement or consequences.

Renewable energy credits should be reserved for more benign and deserving technologies such as solar power. It would be an extreme perversion to allow, or worse yet to actually reward, the burning of C&D wood in the name of clean, renewable energy.

Accordingly, I ask you to remove “organic refuse derived fuel” from the list of biomass fuels and add “construction and demolition wood” to the list of excluded renewable energy supplies.

Secondly, I strongly oppose language in Section 20 that overrides local control and jeopardizes public parks and other lands. Let’s not throw out the baby (democracy and local control) with the bath water (obsolete petroleum- and coal-based energy base). Most rural communities do not have the bylaws in place that would provide protection, and there would be a strong temptation to sacrifice rural communities for the greater good in a rush to site alternative energy facilities. State parks and forests would similarly be in jeopardy. Alternative energy projects should have appropriate reviews and controls, and there is no reason why local control should be bypassed. I am afraid that in the rush to put new energy facilities on line, we will make serious blunders that will damage human health and the environment, while sacrificing rural communities and public parks and forests. For example, I am concerned that wind turbines will be sited hastily in locations detrimental to birds and other wildlife. For each site, we need go through a careful deliberate process, which thoroughly incorporates local and other input, to make sure we address our energy needs in an intelligent way. This section of the bill is so vaguely written that many readers likely will not understand the implications, and thus not comment on it. I find this section extremely worrisome.

Accordingly, I ask you to delete all language that would reduce or eliminate local control or jeopardize our public lands. And rewrite Section 20 in a way that is understandable to the layperson.

Thirdly, I would like to see a requirement that energy producing facilities be sited near the consumers of that energy. The natural tendency otherwise will be for the populous eastern part of the state to want to site facilities in the less populated western part of the state, where there are “fewer receptors.” I am afraid without such a fairness provision, with eastern Massachusetts having its share of generating facilities, we will have another “Quabbin” situation, which would be abusive to western Massachusetts.

Lastly, I would like to see more emphasis on energy conservation, small-scale decentralized power generation, and education. The bill makes a good start but does not go far enough, given the magnitude of our problem. Incandescent light bulbs should be phased out or banned outright. Office buildings should not be lit up at night like Christmas trees. Substantial incentives for residential photovoltaic units would be excellent. California’s efforts should be reviewed to see if there are practices that Massachusetts could adopt.

Thank you for creating this important bill, and for the opportunity to comment on it.

Very truly yours,

A handwritten signature in cursive script that reads "Ellen Moyer".

Ellen Moyer, Ph.D., P.E.