

March 6, 2006

Ms. Sharon Weber
Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
One Winter Street
Boston, MA 02108

RE: Comments on Proposed Amendments to 310 CMR 7.00 and 7.29

Dear Ms. Weber:

The New England Energy Alliance appreciates the opportunity to provide comments on the Massachusetts Department of Environmental Protection's (DEP's) proposed amendments to 310 CMR 7.20 and 310 CMR 7.00 Appendix B to implement a government mandated credit trading system for greenhouse gases emitted from six electricity generation facilities located in Massachusetts.

The Alliance is a coalition of energy providers, and business and trade organizations representing some of the region's largest energy consumers and employers that advocates for action to ensure the availability, reliability and affordability of future energy supplies and associated infrastructure. Therefore, we are concerned about policies and actions that discriminate against energy supply infrastructure technologies. Our concern is deepened when such policies and actions appear to be arbitrary and in conflict with well established energy and economic initiatives to lower the cost of electricity, increase fuel diversity in power generation, and encourage innovation in a manner that minimizes economic impacts.

If the goal of the amendments is to reduce molecules of CO₂ emitted into the atmosphere, then it does not seem reasonable that certain non-emitting technologies would be deemed acceptable while others would not. The Commonwealth's own Climate Action Plan states very clearly that priority is to be given to "pollution reductions that are compatible with economic growth," a point apparently lost in the proposed amendments.

We believe the rules should create a meaningful and sustainable credit trading market to minimize the cost of compliance and encourage innovation. Specifically, our comments will address the: 1) Arbitrary Exclusion of Essential Technologies; 2) Artificial Geographic Limits; and 3) The Cost to Massachusetts Consumers.

Arbitrary Exclusion of Essential Technologies

The proposed Massachusetts amendments either arbitrarily exclude or appear to discourage some important non-carbon emitting technologies, including nuclear power and electricity efficiency projects, which runs counter to important energy goals that encourage fuel diversity, ensure reliability and result in lower costs.

Other regional and national policies and proposals aimed at reducing GHG emissions or addressing climate change treat all non-carbon emitting energy sources equally - as they should. For example, neither the Regional Greenhouse Gas Initiative (RGGI) nor a number of national proposals discriminate against specific technologies. The RGGI Memorandum of Understanding, in a section on complementary energy policies, states the importance of “programs that encourage development of non-carbon emitting electric generation and related technologies.”¹ In addition, the National Commission on Energy Policy in its December 2004 report calls for a national program that treats all non-emitting sources equally.²

Nuclear Power

Nuclear energy produces large quantities of electricity reliably without emitting greenhouse gases into the atmosphere. In Massachusetts alone, the Pilgrim nuclear power plant produces 13% of all in-state electricity generation and comprises the majority of the state’s non-CO₂ emitting electricity generation.³ On an annual basis, the plant avoids the emission of about 3.8 million tons of CO₂ annually⁴ – the amount that would be generated if it were to be replaced with natural gas-fired generation. The reason Pilgrim, and the region’s other nuclear power plants, make such an important contribution is their excellent operating performance. With capacity factors of about 90 percent, the performance of these units well exceeds those of any other power producing technology. As a result, nuclear power plants should certainly receive equal treatment with other non-emitting sources.

Methods to increase and retain nuclear power plant output ensure that the amount of electricity generation required by fossil-fired generating facilities (currently the only feasible alternative to nuclear baseload generation) will be significantly reduced, thereby

¹ On December 20, 2005 seven states announced an agreement to implement the Regional Greenhouse Gas Initiative as outlined in a Memorandum of Understanding signed by the Governors of the participating states including Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York and Vermont.

² “Ending the Stalemate: A Bipartisan Strategy to Meet America’s Energy Challenges”, National Commission on Energy Policy, December 2004.

³ U.S. Energy Information Administration, Massachusetts Electricity Profile.

⁴ “Nuclear Energy in Massachusetts”, Nuclear Energy Institute, August 2005.

avoiding substantial quantities of greenhouse gas emissions. This can be accomplished in three ways:

Power Plant Uprates: Nuclear plant owners implement power uprates as a way to increase power plant output. Through using higher enriched fuel and/or plant modifications, more plant thermal energy can be produced and thus more electricity. Through 2005, the U.S. Nuclear Regulatory Commission (NRC) has approved over 100 power plant uprates increasing nuclear plant capacity by about 4,500 megawatts (MW).⁵ These uprates have avoided the construction of 27, 300MW combined cycle natural gas plants and the emission of about 17 million tons of CO₂ per year.⁶

The most recently approved nuclear power uprates in New England – Vermont Yankee at 20% and Seabrook at 5.2% – will eliminate the need to construct 350MW of natural gas-fired power plant capacity and avoid the emission of 585,000 tons of CO₂ per year. Over the next four years, the NRC expects another 18 plants to request uprate approval totaling about 1200 MW.⁷ A nuclear uprate is a non-carbon emitting means of adding new capacity and should not be excluded in the proposed Massachusetts regulation amendments.

Plant License Renewal: Nuclear plant license renewal offers another opportunity for increasing/maintaining non-carbon emitting capacity. In the U.S., nuclear power plants are licensed to operate for 40 years, but are allowed to extend their operating licenses for an additional 20 years if NRC requirements are met. The process is rigorous and can require extensive capital investment. However, for economic reasons, not every nuclear plant will seek license renewal, or for technical reasons, receive NRC approval.

In New England, the NRC approved license renewal for the Millstone units in Connecticut, and the owner of both Pilgrim and Vermont Yankee recently submitted renewal applications. If the licenses of Pilgrim and Vermont Yankee are not extended, the region will require about 2300 MW of replacement fossil-fueled capacity in 2012 – equivalent to seven 300MW natural gas combined cycle plants. Nuclear plant license renewal is another non-carbon emitting means of adding new capacity and should not be excluded as an eligible technology.

New Nuclear Plants: The construction of new nuclear power plants – while not likely to occur in New England in the near-term – also should not be ruled out. The NRC has recently approved the final design of a new advance design reactor and has streamlined new plant construction and operation license approval processes. Nuclear companies in other regions of the country have preliminary

⁵ “Approved Power Uprates (1977 – 2005)”, Nuclear Energy Institute, November 2005.

⁶ Assumes capacity factor of 50% for combined cycle plant, and CO₂ emission rate of 0.98lbs/kWh.

⁷ “Power Uprates for Nuclear Plants”, Fact Sheet, U.S. Nuclear Regulatory Commission.

plans for new plant construction and a new Merrill Lynch report predicts gains for nuclear power businesses. In fact, the U.S. Energy Information Administration in its latest long-term energy forecast projects the addition of 6,000 megawatts of electric generating capacity from the construction of new nuclear power plants between now and 2030.⁸

The assertion that regardless of emissions credits, nuclear plants will continue to operate and proceed with license renewal and uprates is not supported by history and should be irrelevant. There is a well-established precedent for early nuclear plant retirements in New England, and it is not unreasonable to think that emissions credits may become a factor in decisions about future operations.

Nuclear power emission credits would also be valuable in “jump starting” an emissions trading system especially when there is no pipeline of renewable projects as a source of credits. Nuclear power emissions credits would increase the supply of the “commodity” and serve to lower the price. In the end, this will save consumers money.

Electricity Efficiency

While the proposed amendments specifically identify “natural gas/heating oil/propane end-use energy efficiency projects” as eligible non-carbon emitting projects, it is not apparent that electricity efficiency projects would be eligible.

Reducing electricity consumption is important because it conserves natural resources and reduces emissions. Through 2005, Massachusetts electricity customers have invested more than \$900 million for such programs through mandates established under the Massachusetts Electricity Restructuring Act.⁹ These programs avoid the emission of about 2 million tons of CO₂ over the lifetime of the energy efficiency measures.¹⁰ Region-wide, New Englanders spend \$200 million for such programs.

Owners of power generators that seek to avoid emissions by funding energy efficiency programs should be encouraged to do so as part of their strategy. Massachusetts electric distribution companies as well as others in the region have long been leaders in the delivery of successful electricity efficiency programs. It seems counterproductive that the proposed amendments would not leverage these efforts as part of reducing greenhouse gas emissions.

⁸ U.S. Department of Energy, Energy Information Administration, “Annual Energy Outlook for 2006” (with projections to 2030).

⁹ U.S. Department of Energy, Energy Efficiency and Renewable Energy, “Electric Industry Restructuring in Massachusetts”, updated January 2006.

¹⁰ “2002 Energy Efficiency Activities, A Report by the Division of Energy Resources”, Office of Consumer Affairs and Business Regulation, Commonwealth of Massachusetts, Summer 2004 (latest available).

Artificial Geographic Limits

The proposed amendments require eligible offset projects to be limited to the RGGI states¹¹ or other jurisdictions having a carbon constraining program approved by the Massachusetts DEP – which are not defined.

The RGGI Memorandum of Understanding allows offset allowances from projects located anywhere in the United States – the “Proposed Initial Geographic Scope” of Massachusetts eligible emissions trading projects should do the same from the start. Artificial boundaries are inconsistent with sustainable and competitive markets. In fact, artificial boundaries have the clear effect of increasing cost to consumers.

The control of greenhouse gas emissions is a global problem which is not going to be measurably impacted by small selected geographic areas. Even limiting the trading market to the RGGI geographical area represents a clear limit as the generation of electricity within this artificial boundary is only 8% of the nation’s total.

It is the Alliance’s position that there should be no artificial geographic limits – the global nature of greenhouse gases means that beyond certification and verification of a participating facility or project, there should be no other restrictions to an emissions trading program.

The Alliance also believes it is important to have as much consistency and compatibility across jurisdictions as possible to minimize some of the uncertainty affecting energy infrastructure development. In a recent report issued by the Alliance, the Analysis Group found that uncertainty about climate change rules is a factor in chilling investment in new electricity infrastructure.¹² From that standpoint, establishing well-founded rules that are consistent within the region is important.

Costly to Consumers

It is well known that Massachusetts is a high-cost electricity state – now ranking 4th in terms of having the highest average electricity rates in the country.¹³ The price of electricity has always been a concern in New England because of our remoteness from traditional indigenous fuels used for power generation. These high prices put Massachusetts and other New England states at a disadvantage with other parts of the country that compete with the region in today’s high tech economy.

¹¹ Includes Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey New York, Rhode Island and Vermont

¹² “New England Energy Infrastructure – Adequacy Assessment and Policy Review”, Analysis Group, November 2005.

¹³ Energy Information Administration, data for November 2005.

A recent consumer survey sponsored by the Alliance confirmed that energy is among the top three most important issues, joining the economy and health care.¹⁴ In another question, consumers were asked whether the region should be just as concerned about ensuring energy supplies at reasonable prices as providing environmental leadership, and by an overwhelming margin (61%) answered yes. And to underscore the importance of energy costs to the economy, A.T. Kearney in a recent report for the New England Council identified “infrastructure costs,” including energy, as “being used as a quick filter to dismiss regional investment.”¹⁵

The plants covered by this regulation are among the most important sources of base load capacity in the region. Despite assertions to the contrary, the cost of compliance will have an economic impact because of the bilateral nature of many contracts. Driving the price of compliance higher by restricting the market will only make more difficult the region’s ability to address serious energy and economic growth challenges. Those challenges can be addressed most effectively if the Commonwealth adopts a market mechanism for GHG emission trading that is robust, meaningful, sustainable and fully compatible with energy and economic goals.

Summary

The New England Energy Alliance recommends that:

1. All sources that reduce, avoid and sequester CO₂ be eligible for consideration to receive credits as long as they meet certification criteria. No technology able to reduce emissions should be prohibited. This would include energy efficiency program funding sponsored by generators, all renewable projects and nuclear projects (uprates, license extensions and new plants).
2. As under the RGGI Memorandum of Understanding, there should be no artificial geographic limits – due to the global nature of greenhouse gases – beyond certification and verification of a participating facility or project – there should be no other restrictions.
3. Careful consideration be given to balancing energy, economic and environmental goals, consistent with the Commonwealth’s own Climate Action Plan to minimize the costs of compliance, encourage innovation and minimize disruptions to fuel diversity and reliability improvement efforts.

¹⁴ Opinion Dynamics Corporation telephone survey of 600 registered voters in New England conducted for the Alliance, completed in October 2005.

¹⁵ “Sustainable Prosperity – An Agenda for New England,” A.T. Kearney, June 2005.

Ms. Weber
March 6, 2006
Page 7

Again, the New England Energy Alliance appreciates the opportunity to submit these comments. Should you need additional information or clarification on these comments, please contact me at cgustin@newenglandenergyalliance.org, or 617- 216-5765.

Sincerely,

Carl Gustin
President