The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

February 10, 2011

The Honorable James Garrity, Chairman
House Science, Technology, and Energy Committee
Legislative Office Building, Room 304
Concord, NH 03301

Re: HB 519-FN relative to Repealing New Hampshire's Regional Greenhouse Gas Initiative (RGGI) Cap and Trade Program for Controlling Carbon Dioxide (CO_2) Emissions

Dear Chairman Garrity and Members of the Committee:

Thank you for the opportunity to comment on behalf of the Department of Environmental Services (DES) regarding House Bill 519-FN, which seeks to repeal New Hampshire's Regional Greenhouse Gas Initiative (RGGI) cap and trade program for controlling carbon dioxide (CO_2) emissions. In the interest of long-term regulatory and market certainty, DES believes that any contemplation of revisions to the state's RGGI program would best be considered in the larger context of the statutorily required 2012 comprehensive review of NH's RGGI program (pursuant to RSA 125-O:27). Therefore, DES does not support the bill and recommends that action be deferred pending the 2012 review.

RGGI[1] is a flexible, market-driven policy that begins to address the issue of climate change by capping and then modestly reducing regional CO_2 emissions from large fossil-fueled power plants. The policy puts the electricity industry on a path toward reducing long-term energy costs by greater investment in energy efficiency and creates a market signal that encourages development of cleaner energy sources and more local energy sources, thereby increasing New Hampshire's energy independence.

There are several significant benefits to implementing RGGI in New Hampshire. First, and foremost, is that New Hampshire is economically better off participating in RGGI than not. RGGI implementation in the other nine states in the region will increase electricity costs regionally, and approximately half of the state's power consumption is purchased from the 6-state New England regional grid. If New Hampshire participates, then this additional cost can be offset by the sale of RGGI allowances allocated to New Hampshire, and reinvesting the proceeds in energy efficiency measures.[2]

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[1] RGGI Fact Sheet, RGGI, Inc. website http://www.rggi.org/docs/RGGI_Fact_Sheet.pdf

[2] Economic Impact in New Hampshire of the Regional Greenhouse Gas Initiative (RGGI): An Independent Assessment, – University of New Hampshire (Gittell and Magnusson January, 2008)

RGGI is also an economic and environmental "win-win," a pro-business strategy that:

- helps to mitigate and ultimately reduce long-term energy costs via greater investment in energy efficiency;
- creates a market signal that encourages development of cleaner and, in many cases, more local energy sources;
- increases our energy independence with more local energy sources, thus keeping more energy dollars local;
- starts to reduce greenhouse gas (GHG) emissions to avoid the most deleterious projections of climate change impacts;
- increases economic opportunities for NH businesses for development of clean energy technologies; and
- places NH generators in an advantaged position to respond to future federal policies and better manage carbon constrained energy markets.

Market-based implementation has resulted in competition, efficiency, and innovation that have delivered emission reductions at the lowest possible cost. New Hampshire's participation has allowed the state to mitigate the electricity cost impact of RGGI implementation throughout the rest of the ten state region, as compliance costs have been reflected in the regional wholesale price of electricity. This has been accomplished through the creation of a state fund to increase energy efficiency from the sale of RGGI allowances.

In 2009, actual CO_2 emissions were about two thirds of the projected cap level, or in other words a 33% reduction in emissions was achieved. These reductions were attributable to a variety of factors, and only a portion may be directly attributable to RGGI.[3]

Each of the state's affected power plants (i.e., Public Service Company of New Hampshire's (PSNH's) Bow, Newington, and Portsmouth plants, Granite Ridge Energy's (GRE's) Londonderry plant, and Newington Energy's (NEL's) Newington plant) must obtain enough allowances by the end of each three year period to equal their emissions in that same period. Each allowance represents one ton of CO_2 emissions. Allowances could be obtained by each affected power plant by: purchasing allowances that are budgeted to New Hampshire (or to other states) either at quarterly regional auctions or from a secondary market; purchasing offset allowances from developers of certain projects that reduce CO_2 emissions outside the electricity sector; or reducing CO_2 emissions and CO_2 emission rates (e.g., PSNH's Northern Wood Power Project). PSNH will also be given a limited amount of allowances in order to transition from New Hampshire's landmark first-in-the-nation Clean Power Act (an act that already called for more stringent Phase II CO_2 emission reductions) to RGGI. Regionally, power plants could reduce the amount of allowances needed for compliance by reducing emissions via increased investments in energy efficiency, increasing renewable energy generation as required by states' Renewable Portfolio Standards (RPS), increasing dispatch of lower-emitting generation (e.g.,

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[3] *"Relative Effects of Various Factors on RGGI Electricity Sector CO2 Emissions: 2009 Compared to 2005"* NYSERDA, November 2, 2010
http://www.rggi.org/docs/Retrospective_Analysis_Draft_White_Paper.pdf

natural gas-fired plants), development and future installation of carbon capture technologies, or a combination of all of the above.

The University of New Hampshire's Whittemore School of Business and Economics conducted an analysis (the UNH study[4]) of the impact of implementing RGGI on New Hampshire ratepayers and the economy. The UNH study concluded that overall there would be a net positive economic and environmental benefit. The lowest long-term net utility cost is to auction allowances and invest the revenues in energy efficiency projects. If New Hampshire does not participate in RGGI, then it receives no revenues from the sale of allowances, and costs would be higher. For that reason, DES supports selling allowances at the regional auction. Currently, this means selling 69% of New Hampshire's 8.62 million allowances, or about 6 million allowances annually, until any transitional Clean Power Act allowances awarded to PSNH have been fully allocated. Pursuant to RSA 125-O:21 III, revenues from the sale of allowances have been placed in a fund administered by the Public Utilities Commission (PUC) and have been used primarily for energy efficiency, because that will yield long term energy savings and further reduce emissions, making future compliance easier.

The RGGI Program was the product of an extensive stakeholder process that began in the fall of 2003 and continues to date. Stakeholders included electric utilities, renewable energy producers (wind, hydroelectric, solar, biomass, etc.), environmental interests, industrial and business interests, parties with ratepayer interests in mind, and implementing regulatory agencies. DES believes the program strikes a reasonable compromise in the best interest of all stakeholders. RGGI provides a competitive environment for less polluting resources, and sends a market signal to investors in lower-emitting or non-emitting energy projects.

While the RGGI program design is intended to ultimately result in long term economic and environmental benefit, it also includes several protections intended to minimize, if not completely avoid, detrimental economic developments. Foremost, the "modest" cap level (in 2009 actual CO_2 emissions were about two thirds of the cap and are now projected to remain below the cap for several years) has resulted in an abundant supply of allowances, thus minimizing costs. This will result in significant banking that provides substantial compliance flexibility for sources. A program review in 2012 is another component of the RGGI program. It would be premature to repeal the program prior to completion of the extensive review.

Implementing RGGI for New Hampshire is good policy, as it makes sense both economically and environmentally. Stabilizing and then modestly reducing emissions of CO_2 that contribute to climate change is a good first step. The RGGI Program, through the market signals it sends, has begun the process of creating a long term climate change action policy[5] for New Hampshire and it should not be repealed.

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[4] Please see footnote 2.

[5] *A Climate Action Plan For the State of New Hampshire* released on March 25, 2009 http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/index.htm

DES looks forward to working with all who share an interest in addressing climate change to motivate further reductions of CO_2 emissions in New Hampshire and the region. DES has appended additional comments that address selected specific bill language. Thank you for the opportunity to provide testimony. Should you have further questions or need additional information please feel free to contact Robert R. Scott, Director, Air Resources Division (271-1088, rscott@des.state.nh.us).

Sincerely,

Thomas S. Burack
Commissioner

cc: HB 519-FN sponsors

APPENDIX
DES comments relative to specific HB 519-FN Bill Language

please allow DES to comment specifically on the general findings clauses (in italics below) and other specific language in HB 519-FN.

"*I. There has been no credible economic analysis of the costs associated with carbon dioxide emissions reduction mandates and the consequential effect of the increased costs of doing business in New Hampshire.*"

As stated in its testimony letter, DES believes that the UNH Study is a credible economic analysis. Similar analyses were conducted by the University of Maryland for the State of Maryland[6] and by Environment Northeast[7] and by Synapse Economics[8] for the whole RGGI region and are generally consistent with the UNH analysis. In fact, New Hampshire has actually enhanced economic opportunities for its citizens by participating in RGGI. Carbon Solutions New England (CSNE) was contracted by the PUC to evaluate the environmental and economic impacts of RGGI grants and will provide testimony relative to the job creation and energy savings. Furthermore, DES and the PUC jointly reported[9] to legislative oversight committees that the total RGGI costs, as estimated by PSNH, ranged from $0.0007 to $0.0012 per kilowatt hour for the average residential ratepayer (or 37 to 69 cents per month on the average ratepayer monthly bill). Changes in electric rates, particularly the energy or generation component of rates, which is larger than all other components combined, have been driven primarily by changes in the cost of fossil fuels, especially natural gas, which is the primary fossil fuel now used to generate electricity in New England (i.e., natural gas typically sets the price of electricity on the margin).

"*II. Businesses, industries, and food producers have been forced to reduce carbon dioxide emissions as a result of government mandates and cap and trade policies through the regional greenhouse gas initiative, which has increased the cost of doing business, pushed companies to do business with other states or nations, and increased consumer costs for electricity, fuel, and food.*"

Also as stated in DES' testimony letter, PSNH, Granite Ridge Energy, and Newington Energy are the affected power plants in New Hampshire. Businesses, industries, and food producers have not been forced to reduce CO_2 emissions under the RGGI Program. This is a major difference between the economy-wide federal bill that was proposed and the electricity

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[6] "Economic and Energy Impacts from Maryland's Potential Participation in the Regional Greenhouse Gas Initiative," Center for Integrated Environment Research , University of Maryland, January 2007, Available online at http://www.cier.umd.edu/RGGI/documents/UMD_RGGI_STUDY_FINAL.pdf

[7] Environment Northeast, "Economy-Wide Benefits of RGGI: Economic Growth through Energy Efficiency" (December 2010)

[8] Synapse Economics, "Electricity Energy Efficiency Benefits of RGGI Proceeds" (October 5, 2010)

[9] *RGGI Annual Report* dated October 12, 2010 http://puc.nh.gov/Sustainable%20Energy/GHGERF/RGGI%20Annual%20Reports/2010%20RGGI%20Annual%20Report%20to%20NH%20Legislature%20101410.pdf

sector-only RGGI Program. Power plants are already familiar with cost effective cap-and-trade programs for other pollutants (acid rain, nitrogen oxides, and sulfur dioxides) that have been in place at the federal level since the early 1990s. Generally, they prefer such cap and trade programs to the alternative, mandated installation of emissions control technologies by a certain date. Unfortunately, lack of electricity sector-only legislation at the federal level may lead to less desirable regulation by the US EPA.

"III. The Congressional Budget Office warns that the cost of cap and trade policies will be borne by consumers and will place a disproportionately high burden on poorer families."

The Congressional Budget Office (CBO) economic analysis was specific to the economy-wide federal bill. The electricity sector-only RGGI Program has not significantly adversely affected consumers, nor has it placed a disproportionately high burden on poorer families. In fact, at least 10% of the RGGI revenues are used to assist low-income residential customers.

"IV. Simply reducing carbon dioxide emissions in New Hampshire will not have a significant impact on international carbon dioxide emissions reduction, especially while countries like China, Russia, Mexico, and India emit an ever-increasing amount of carbon dioxide into the atmosphere.)

Electricity generation has not shifted to other states or nations. Net imports into the New England Power Pool have not changed significantly since RGGI began. It is certainly the case that emissions from China, India and other emerging economic powers also need to be reduced, and those nations are beginning to take steps to do so[10]. However, the RGGI states collectively represent the world's seventh largest economy and emissions reductions are necessary from all major contributors. New Hampshire is not acting alone in RGGI, and we have a longstanding tradition of leading by example.

"V. Economic growth has been and will be sacrificed for a reduction in carbon dioxide emissions that would have no appreciable impact on global concentrations of carbon dioxide.."

DES is unaware of any analysis attributing detrimental economic impacts to RGGI. Waiting until all countries agree before any state takes action would risk continued harmful

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[10] *What Can We Expect on Climate and Energy in China in 2011?* WRI, Seligsohn & Hsu January 5, 2011 http://www.wri.org/stories/2011/01/what-can-we-expect-climate-and-energy-china-2011 and *Efforts to Fight Climate Change Revive Optimism* NY Times January 25, 2011 http://dealbook.nytimes.com/2011/01/25/efforts-to-halt-climate-change-provoke-new-optimism/ Press Trust Of India / New Delhi January 3, 2011 http://www.business-standard.com/india/news/cap-and-trade-regime-coming-for-industrial-emissions/420528/

effects from climate change, as already experienced right here in New England[11]. A failure to act to address climate change within New Hampshire and globally is expected to result in increased impacts and costs to New Hampshire. The state was hard hit by 100-year flood events in 2005, 2006, and 2007. These floods caused major damage in several communities and resulted in the loss of life, as well as an enormous cost to affected citizens, municipalities, and the state's highway system. Flooding over this period caused an estimated $130 million in property damage across the Northeast. The National Oceanic and Atmospheric Administration (NOAA) declared that 2010 tied 2005 as the warmest year in 130 years of global temperature recording[12]. Although short-term weather events cannot be directly attributed to climate change, scientists anticipate that the incidence and frequency of severe weather events such as these, as well as the recent 2008 ice storm, will increase with rising global temperatures. Failure to reduce CO_2 emissions will lead to climate change that will result in more severe weather events and the costs related to emergency response, storm clean-up, and reduced productivity and economic activity will be significant.

"VII. Europe's cap and trade system has been undermined by political favoritism and accounting tricks and has failed to achieve its carbon dioxide emissions reduction targets."

Similar to the comparison between the federal bill and the RGGI Program, comparing the European Union (EU) economy wide program to the RGGI Program is not valid. Banking was not allowed under Phase I of the EU Program. The EU cap is more stringent than the RGGI cap. RGGI's market monitor has found no evidence to date of any collusion by market participants. RGGI already has price relief mechanisms at $7 and $10 allowance price triggers, but all of the allowances sold at the most recent auction were sold at the minimum "reserve" price of $1.86. Thus, no offsets have been created nor used to date under RGGI, but the RGGI Program does include strict requirements for the creation of offsets. Much of the criticism of the EU Program had to do with creation and trading of their offsets, called Clean Development Mechanisms (CDMs).

Additional issues

It shuld be noted that the original New Hampshire Clean Power Act (as codified in RSA 125-O prior to RGGI) included a Phase I cap and language requiring a lower Phase II cap which was fulfilled with the implementation of RGGI in 2008. It appears that HB 519-FN not only proposes to repeal the RGGI Program, but also to repeal the caps established previously in the Clean Power Act, as well.

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[11] *"Trends in Extreme Precipitation Events for the Northeastern United States"* UNH and CSNE March 2010 http://www.carbonsolutionsne.org/resources/ne_climate_reports/pdf/2010_NortheastExtremePrecip.pdf

[12] *2010 Tied For Warmest Year on Record* NOAA January 12, 2011 http://www.noaanews.noaa.gov/stories2011/20110112_globalstats.html

DES is concerned with technical aspects of the bill's proposed revisions to RSA 125-O specifically regarding the relationship of emissions caps, trading and banking language, and the award of emissions allowances to PSNH for energy efficiency investments (particularly in the absence, as proposed, of any carbon trading program). We would seek the opportunity to work with the sponsors to better clarify the intent of this language and to carefully understand the implications and possible unintended consequences of the bill as written. In particular, careful thought should be given to the disposal of allowances already purchased by compliance entities, and the timing of New Hampshire's potential repeal as it relates to the three year compliance period.