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Mr. Christopher Sherry
Bureau of Sustainable Communities
And Innovative Technologies
State of New Jersey
Department of Environmental Protection
Div of Science, Research and Technology
P.O. Box 409
Trenton, New Jersey 08625-0409

Re: RGGI Offset Options: Fuel Switching of Residential/Commercial Facilities and Fleets to Natural Gas

Dear Mr. Sherry, *Chris*

KeySpan would like the RGGI Staff Working Group (SWG) to consider the conversion of residential and commercial heating systems and other small to moderate combustion sources to natural gas as a viable offset option that can be included immediately in the model rule. KeySpan recognizes that the SWG would like to account for gas conversions of large industrial boilers as a possible opt-in program with the understanding that these sources may be regulated in future phases of the program. However, it is highly unlikely that smaller heating systems would ever be regulated in any greenhouse gas reduction program, yet conversion of large numbers of residential and commercial facilities and vehicle fleets from petroleum products to natural gas can provide for a significant reduction of CO₂ emissions.

Determining the emission reductions due to the conversion of a typical residential or commercial heating system from distillate oil to natural gas is a straight forward calculation based on the carbon content of the respective fuels, as documented in NESCAUM's Greenhouse Gas Trading Demonstration Project Report. Emission factors documented by the US Department of Energy and the EPA show that 118 pounds of CO₂/mmbtu are emitted when firing natural gas, compared to 162 pounds/mmbtu when burning distillate fuel oil (home heating oil). This constitutes nearly a 30% reduction in CO₂ emissions. The number and fuel consumption of these conversions to natural gas is easily documented through the billing records. The emission reductions would then be determined by calculating the difference in CO₂ emissions on natural gas verses the equivalent quantity of avoided distillate oil. These reductions are real, easily quantifiable, verifiable and are sustainable. For example, conversion of 100 homes, at an average fuel consumption of 150 mmbtu/year, would save approximately 6600 tons of CO₂ emissions over a 20 year period. Similarly, the conversion of larger commercial facilities such as offices, warehouses, hospitals, etc. would provide an even greater CO₂ reduction potential. Fleet vehicle conversions from gasoline and diesel fuel to natural gas should also be eligible for offsets.

In addition to CO2 reductions, fuel conversions from petroleum based fuels to natural gas offer the co-benefits of SO2 and particulate emission reductions, the reduction of oil spills, the reduction of underground tank leakage and the reduced dependence on foreign oil.

I would like to thank you for your consideration of this proposal and would be happy to discuss this with you in greater detail.

Yours Truly,



Robert D. Teez
Director, Environmental Engineering and Compliance

CC: Mr. Franz Litz (NYSDEC-Albany)
Ms. Sonia Hamel (Massachusetts Office for Commonwealth Development)