

TO: Regional Greenhouse Gas Initiative Agency Heads and Staff Working Group
FROM: Northeast Regional Greenhouse Gas Coalition Member Companies
(BP America, Conectiv Energy, ConEdison, Dominion, PSEG, Pfizer and Waste Management)¹
DATE: May 22, 2006
RE: **Comments and Recommendations in Response to RGGI Draft Model Rule**

This memo and attached appendix provide the Northeast Regional Greenhouse Gas Coalition's (GHG Coalition) comments and recommendations in response to the March 23, 2006 draft model rule of the Regional Greenhouse Gas Initiative (RGGI). While the GHG Coalition's comments and recommendations focus on the draft model rule, some of the Coalition's recommendations, if adopted, would require technical amendments to the RGGI MOU. The GHG Coalition does not believe that the major material provisions of the MOU should be changed. The Coalition believes, however, that the RGGI Signatory States should be willing to consider changes in particular to the use of offsets that would require amendments to the MOU to make it better suited as a potential model for a national program, should one be implemented.

The MOU's major material provisions supported by the GHG Coalition are: cap stabilization at current levels then a reduction below current levels over ten years, the multi year compliance periods, the recognition of the role of offsets from anywhere in the United States to achieve the most cost effective GHG emission reductions, unrestricted allowance banking, the commitment to address electricity imports and emissions leakage, and the premise that once a national level program is adopted, RGGI will transition to that national program. The GHG Coalition also supports the commitment by Signatory States to review the program after each compliance period to allow midcourse corrections to key programmatic provisions.

The GHG Coalition has fundamental concerns with the design of five key elements of RGGI, which the GHG Coalition's comments and recommendations largely focus on. These include:

¹ The GHG Coalition members have participated as official stakeholders to the RGGI process since its inception, participating in every RGGI meeting and workshop and submitting consensus recommendations throughout the entire process. See www.ghgcoalition.com/resources for comments submitted to the RGGI process.

- Carbon offset provisions;
- Safety valve/trigger mechanisms;
- Consumer benefit or strategic energy purpose allocation;
- Imports & leakage; and
- Harmonization with a federal program.

Carbon Offset Provisions

The GHG Coalition views the use of unconstrained offsets as a necessary component to the success of mandatory climate change programs. Given the lack of cost effective commercially available CO₂ control technologies, offsets must play a significant role over the next 10 years (at least) to achieve cost effective GHG emission reductions. This approach allows the electric generating sector to cost effectively integrate new technologies according to realistic capital investment cycles. However, RGGI's draft offset provisions are severely constrained, which introduces unnecessary uncertainty to the market and added risks for CO₂ budget sources.

The draft RGGI offset provisions send the wrong signal to the economy and to potential project developers. The out-of-RGGI region discounts, use limitations and the complexity of the safety valve provisions introduce a level of uncertainty into the program that will substantially inhibit the development of projects (reducing the supply of available offsets) and send a muted demand signal to the emerging offset market. As drafted, the offset provisions will likely make the program more costly for all.

The offset provisions of the RGGI program appear to assume that a mature offsets market already exists in the U.S. when one does not. Offsets are not typically an "off-the-shelf" commodity that can easily be obtained in the marketplace. There are complicated contractual issues and financial and regulatory risks associated with procuring offsets. RGGI CO₂ budget sources will be the first existing sources in the U.S. seeking to create and otherwise acquire GHG emissions reductions from projects for certification and use for compliance as RGGI offset allowances. Accordingly, the design of the overall RGGI carbon offset administration, protocol

development, and project approval for crediting should seek to minimize transaction costs while creating certainty for GHG emission reduction project developers and investors.

The GHG Coalition continues to believe that a limitation on the quantity of offsets for compliance with RGGI is an unreasonable constraint, which may have negative cost implications and will negatively impact the desired result of maximizing GHG reductions. Rather than imposing geographic and absolute limits on the use of offsets, RGGI should develop standardized protocols designed to achieve real, surplus, verifiable, permanent, and enforceable GHG reductions.

Following the MOU, the RGGI draft model rule contains two overly restrictive and unnecessary elements – the 3.3% limitation on the use of offset allowances and the 2:1 discount applied to out of RGGI region offset projects. The RGGI analysis supporting the 3.3% offsets limit recommendation (dated May 1, 2006) indicates that the standard IPM reference case emissions trajectory was utilized with adjustments. While there were at least three other reference cases (ranging from low emissions to high emissions) this analysis only used business as usual (BAU) emissions from one. The analysis also notes that of the three scenarios evaluated (A, B, and C), scenario B was utilized to develop the 3.3% limitation on the use of offsets for CO₂ budget sources, which does not even reflect the regional CO₂ budget agreed upon in the December 20, 2005 MOU. Of the three scenarios evaluated, one assumed BAU CO₂ emissions from affected sources would be less than the cap at the outset of the program while the other two assumed that emissions would be equal to the cap at the start of the program. There was no analysis assuming that emissions could be greater than the cap level at the outset of the program, which would result in a higher allowable percentage of offsets to be used for compliance (at least 5% or greater).

As acknowledged in the RGGI offset analysis noted above, there is a degree of uncertainty involved in this type of analysis, which the GHG Coalition believes should be accounted for by either eliminating the percentage limitation on the use of offsets completely or increasing the percentage limitation on offsets that can be used for compliance purposes at the outset of the program.

The 2:1 discount applied to out-of-region offset projects reduces the available supply by 50% and doubles the cost per ton simply based on the geographic location of the project. First, the GHG Coalition questions the legality of such a provision with regards to interstate commerce. Second, the GHG Coalition views this provision as economic protectionism and counter to RGGI's intent to build momentum for a federal program.

The GHG Coalition is also concerned that the additionality requirements will unduly restrict the creation of offsets. For example, if a project receives system benefit charge and/or renewable energy credits, it is declared automatically ineligible to generate RGGI offset allowances. In certain circumstances, projects that receive SBC funding should be eligible to generate offset allowances for projects that deploy cutting edge innovative technologies. The offset allowances could be awarded on a pro rata basis. This provides additional financial resources to make these types of projects possible.

Renewable portfolio standard (RPS) programs provide multiple in region benefits that should be incentivized in multiple ways in order to attract more investment. These multiple benefits include: avoided fossil fuel fired electric generation; security benefits – reduce dependence on foreign sources of oil; economic benefits to the state it is located; and a host of environmental benefits including reduced CO₂ emissions. Multiple incentive streams could aid the RGGI states in meeting and even exceeding their RPS program requirements.

In addition, some projects that receive revenues from the generation and sale of RECs should be eligible to simultaneously generate offset allowances under RGGI. For example, projects that result in the onsite destruction of fugitive methane emissions – such as landfill gas to electricity and agriculture manure methane projects that generate electricity – should receive offset allowances for the methane destruction and RECs for the renewable electricity generated.

The RGGI MOU indicates that the “Signatory States agree to continue to cooperate on the development of additional offset categories and types, including other types of forestry projects, and grassland re-vegetation projects. Additional offset types will be added to the Program upon

approval of Signatory States.” However, the draft model rule does not provide any process or conditions under which additional offset types will be added over time. Without its explicit inclusion in the model rule, there is a concern that additional project categories will not be added as expeditiously as envisioned.

In the draft model rule, Subpart XX-10.3(d) states that “if a project receives a consistency determination under section XX-10.4, and subsequently the project is required by local, state or federal law, regulation, or administrative or judicial order, then the project shall not be eligible for the award of CO₂ emissions offset allowances after the effective date of the local, state or federal law, regulation, or administrative or judicial order.” This provision creates added regulatory and financial uncertainty that could deter offset project developers from implementing projects to reduce GHG emission reductions for certification as RGGI offset allowances. The RGGI states should explore the development of offset allowance transition provisions for projects that receive consistency determinations that are subsequently required by law or order.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following changes to the carbon offset provisions of the draft model rule:

1. define and include in the model rule the minimum eligibility requirements outlined in the RGGI MOU (real, surplus, verifiable, permanent and enforceable);
2. allow projects to benefit from all available incentive streams (i.e. SBC, RECs, tax credits, tax rebates, etc.) and generate offset allowances;
3. clearly outline the intention of the RGGI states to expand the list of eligible offset categories over time; and
4. explore the development of transition provisions for offset projects that have been certified by the RGGI process if the project activity becomes required by law during the lifetime of the offset award.

The GHG Coalition recommends the following changes be considered to the carbon offset provisions of the RGGI MOU:

1. eliminate the 2:1 discount for eligible offset projects located outside a RGGI Signatory State;
2. eliminate the offset allowance use restrictions by CO₂ budget sources completely;
OR
3. increase the 3.3% limitation on the use of offsets by CO₂ budget sources to at least 5%.

Safety Valve/Trigger Mechanisms

Given the current restrictions on the generation and use of offsets, the GHG Coalition views some level of cost controls designed to protect ratepayers as attractive. However, the safety valve triggers as outlined in the model rule are far too complex (changing multiple variables, including the percentage of offsets that can be used by budget sources, the geographic location of offset projects, and duration of the compliance period) In addition, they create regulatory uncertainty because, even if triggered, they will be reset in subsequent compliance periods.

As structured currently, the safety valve triggers offer little price certainty for either CO₂ budget sources or offset project developers. Instead of providing straightforward price certainty, the RGGI triggers unnecessarily complicate the offset provisions of the program and by extension the entire RGGI program.

The GHG Coalition is concerned that the draft model rule is largely silent on the safety valve trigger methodology that the Signatory States plan on using. In addition to the definition of spot price in XX-1.2(ax) and the language requiring the reporting of allowance prices in XX-7.1(e), the model rule should outline, in a detailed fashion, the trigger methodology including the sources that will be used. It is essential to the integrity of the RGGI program that the allowance price information and methodology utilized to make the price trigger determination are transparent, accurate, reliable, and publicly available. The GHG Coalition is concerned that if the process is not clearly detailed in the model rule, whether or not a trigger has been reached

may be challenged during the program, which would only serve to increase volatility in the allowance market.

The GHG Coalition recognizes that the establishment of a detail methodology for the implementation of the RGGI safety valve triggers is a complex undertaking. As such, the GHG Coalition believes that the development of the safety valve trigger methodology would benefit from direct consultation by the RGGI Signatory States with market experts. The GHG Coalition encourages the RGGI Signatory States to actively engage experts to develop a detailed and transparent methodology for inclusion in the final model rule that will enable the States to uniformly apply the safety valve trigger.

There will be multiple allowance transactions that will influence the spot price of RGGI allowances. The RGGI trigger methodology should consider the following transactions:

1. *Transactions Reported to CO₂ Allowance Tracking System.* Allowances will likely be traded multiple times without being reported to the CO₂ allowance tracking system, so relying on reported transactions alone to determine the market price will be inadequate.
2. *Consumer Benefit or Strategic Energy Purpose Allocation Transactions.* Depending on the size and timing of the allocation/auctions, these allowances could have a significant impact on the market price of RGGI CO₂ allowances.
3. *Brokered Transactions.* Brokers will likely play a large role in the RGGI CO₂ allowance market. Third party indices (such as those currently compiled by Platts) can provide an unbiased assessment of brokered transactions.
4. *Bilateral Transactions.* Companies that currently trade with one another (i.e., for emissions allowances, electricity and fuels) will also likely trade RGGI CO₂ allowances.
5. *Exchange Transactions.* At least two exchanges have been announced for the northeast, which will provide an early market price indicator.²

² The Chicago Climate Exchange recently announced plans to develop an Eastern Climate Exchange and New York Climate Exchange to aid in the establishment of the RGGI emissions markets.
GHG Coalition RGGI Draft Model Rule Comments

The GHG Coalition encourages the RGGI Signatory States to evaluate the methods utilized by current emission markets indices developed by third parties as well as emerging emissions exchanges. For example, current indices for NO_x and SO₂ allowances in the U.S. and CO₂ allowances in the European Union use well-established methods and are utilized widely by market participants. They provide an independent third party resource for allowance prices, which are publicly available. From the outset, these indices have enhanced market transparency and served as a third-party confirmation of indices produced by brokerage companies.

One element of the current safety valve trigger methodology that the GHG Coalition is concerned about is the 14-month market settling period. The 14-month market settling period and the 12-month rolling average design of the triggers means that the earliest in a compliance period that the regulatory agency will make a determination that the triggers have been reached will be after 26 months into a 36-month compliance period. This is far too late into the compliance period to have the intended impact on the costs of complying during that compliance period. As such, the 14-month market settling period should be eliminated entirely.

Finally, the GHG Coalition is aware that some stakeholders are recommending the total elimination of the \$7 trigger as part of an alternative design structure. Absent other changes, the GHG Coalition companies view the \$7 trigger offset expansion as valuable. In order for the GHG Coalition to support the elimination of the \$7 trigger, the offset provisions at the outset of the program would need to reflect the conditions the CO₂ budget sources would benefit from if the \$7 trigger remained part of the program.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following changes to the safety valve/trigger provisions in the draft model rule:

1. directly outline the methodology that will be utilized to determine whether the triggers have been reached, which should include how allowance transactions will be included in the methodology; and
2. indicate the timing that the regulatory agency is bound to identify if and when a trigger has been reached.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following changes be considered to the safety valve/trigger provisions of the RGGI MOU:

1. if offset allowance generation and use restrictions are completely eliminated, then eliminate the safety valve triggers completely;
2. if the safety valve triggers are maintained, then eliminate the 14-month market settling period;
3. if the \$7 trigger is completely eliminated then:
 - i. at the outset of the program, CO₂ budget sources can cover up to 5% of reported emissions with offsets allowances and credits/allowances can be located anywhere in North America without discount;
 - ii. at the \$10 trigger, CO₂ budget sources can cover 15% of their reported emissions with offset allowances and credits/allowances can be located anywhere in North America or the European Union without discount;
 - iii. if the \$10 trigger is reached twice, CO₂ budget sources can cover 20% of their reported emissions with offset allowances and credits/allowances can be located anywhere in North America or the European Union without discount;
 - iv. the duration of the compliance period should increase if the \$10 trigger is reached twice; and
 - v. once the triggers are reached, the percentage of offsets CO₂ budget sources can use for compliance and the geographic scope should not reset.

Consumer Benefit or Strategic Energy Purpose Allocation

The GHG Coalition remains concerned with the consumer benefit or strategic energy purpose allocation – including the percentages that states end up allocating, the method with which it is allocated, the frequency of the allocation, and who has access to the allowances. The draft model rule is largely silent in the areas.

The RGGI MOU states “each Signatory State agrees that 25% of the allowances will be allocated for a consumer benefit or strategic energy purpose”. However, other stakeholders are calling for more than 25% - even upwards of 100%. The GHG Coalition strongly believes that in order to avoid creating an uneven playing field for electric generators or distortions in the regional electricity markets, every RGGI Signatory State must dedicate no more than 25% of its state allowance budget for a consumer benefit or strategic energy purpose.

Such an approach to allowance allocations is unprecedented in any cap and trade program to date. Assuming an eventual 10 state program where all of the states implement a 25% consumer benefit or strategic energy purpose allocation, the size of the allowance pool will be at least 46 million tons per year (around 140 million tons for the first compliance period). At \$3/ton allowance price, this places the value of the consumer benefit or strategic energy purpose allocation at approximately \$420 million for the first compliance period.

The following outstanding questions should be addressed in the draft model rule:

- How and when will the CBA allowances be made available to CO₂ budget sources?
- Who will have access to the allowances?
- If allowances are auctioned, who will be the administrator(s)?
- If allowances are auctioned, will it be at the regional or state level?
- If allocated to entities other than CO₂ budget sources, how will they be allocated?

The GHG Coalition recognizes that the establishment of detailed approaches to allocating/auctioning the consumer benefit or strategic energy purpose allowances is complex. As such, the GHG Coalition believes that the development of the consumer benefit or strategic energy purpose allocation/auction approach would benefit from direct consultation by the RGGI Signatory States with auction experts. The GHG Coalition encourages the RGGI Signatory

States to actively engage these experts to develop a detailed and transparent methodology for inclusion in the final model rule.

The GHG Coalition also notes that the draft model rule appears to leave to the individual RGGI Signatory States the decision to create a new source allowance reserve.³ Since building new electric generating sources in the RGGI region is of paramount importance to addressing reliability and achieving the emission reduction goals of the program, the GHG Coalition believes that this issue would benefit from being directly addressed in the model rule with a standardized approach. Two options the GHG Coalition encourages the RGGI Signatory States to consider are: including new sources in the definition of the consumer benefit or strategic energy purpose allocation, or including a provision in the model rule that directs the creation of a new source reserve and the allocation of any unused new source allowances from a separate account back to CO₂ budget sources. The model rule should also direct States to include a credit for cogeneration facilities to recognize the increased energy efficiency provided by such facilities.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following changes to the consumer benefit or strategic energy purpose allocation provisions in the draft model rule:

1. limit the CBA to 25% in the first two compliance periods (2009-2014 allocation years) with review in 2012 and 2015;
2. provide clear language regarding the timing of the allocation of the consumer benefit or strategic energy purpose allowances;
3. clearly indicate what the consumer benefit or strategic energy purpose funds should be used for using the definition from the RGGI MOU with an emphasis on mitigating ratepayer impacts;

³ The draft Model Rule states at page 50 that this is where the States could create a new source reserve if they choose to do so.

4. indicate that the Signatory States should develop new source allowance reserves, and any unused allowances should be allocated back to CO₂ budget sources; and
5. indicate that the Signatory States should provide a credit for cogeneration facilities that produce useful thermal energy in addition to electricity.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following change be considered to the consumer benefit or strategic energy purpose allocation provisions in the RGGI MOU:

1. include allocation to new sources in the definition of consumer benefit or strategic energy purpose allocation; or
2. direct the creation of a new source reserve and the allocation of any unused new source allowances from a separate account back to CO₂ budget sources

Imports and Leakage

The GHG Coalition remains concerned over the issue of electricity imports and emissions leakage and views that a credible approach to address the issue is critical to the success of RGGI. Since capping CO₂ emissions from electric generating units in the RGGI region will increase the price of electricity in the region—which is already higher than in surrounding areas—the region is likely to see an increase in the import of less expensive, higher CO₂ emitting power.

If electricity imports are not credibly addressed, RGGI consumers will pay higher electric costs for approximately 2/3 of the projected CO₂ emission reduction benefits while creating an adverse competitive dynamic for RGGI CO₂ budget sources. Dealing with the issue of electricity imports and leakage is not only important for the RGGI signatory states but for the potential future expansion of RGGI to additional states and regions of the U.S.

The electricity market dynamics have changed significantly in the eastern half of the U.S. in the last few years. As a result of the expansion of the PJM market since 2002, PJM has tripled in size with 160,000 MW of capacity in 2006. There has been a threefold increase in power flows from west to east since PJM market expansion because many of the constraints that served to adversely impact power flows have been internalized.

More recently, American Electric Power, Allegheny Power, and Pepco Holdings have proposed new transmission lines and a new transmission line from New Jersey to Long Island will carry PJM power to Long Island.⁴ These proposals are summarized below:

- The AEP transmission expansion proposal, called “AEP Interstate Project”, consists of a 765 kV line capable of carrying 5,000 MW of electricity from West Virginia to New Jersey. This line should go into service by 2014.
- The Allegheny transmission expansion proposal, called “Trans-Allegheny Interstate Line”, consists of a 500 kV line capable of carrying greater than 3,000 MW from West Virginia to Maryland.
- The Pepco Holdings, Inc. transmission expansion proposal, called the “PHI Mid-Atlantic Power Pathway”, consists of a 500 kV from northern Virginia to New Jersey.
- Finally, a 500 kV transmission line currently under construction called the Neptune RTS Project from New Jersey to Long Island will carry PJM power to Long Island.

The GHG Coalition's consensus position throughout the RGGI process has been that the RGGI program should be designed so as to solve or mitigate "leakage" associated with imported power. The Signatory States should have rules in place to address imports and leakage at the outset of the program. The draft model rule should accordingly contain a placeholder to incorporate agreed-upon imports and leakage provisions recommended by the I&L Work Group to address electricity imports and emissions leakage. In addition, the RGGI Signatory States should also establish an agreement with the Independent System Operators as soon as possible to provide for the flow of annual gross electricity import data from the ISOs to the RGGI environmental and energy agencies so that a baseline level of imports can be established prior to the start of the program.

⁴ The Energy Policy Act of 2005 changed the dynamics for transmission expansion proposals through a number of provisions including rate incentives, removal of siting and permitting impediments through the designation of “National Interest Electric Transmission Corridors”, and accelerated depreciation of transmission and distribution assets among others.

In addition to the language changes recommended in the Appendix, the GHG Coalition recommends the following be added to the draft model rule:

1. a subpart to incorporate agreed-upon regulatory mechanisms recommended by the I&L workgroup to address electricity imports and emissions leakage.

Harmonization with a Federal Program

The GHG Coalition strongly contends that when a mandatory federal climate change program is implemented, RGGI must be superseded. To the maximum extent possible, RGGI should be designed for a smooth transition to a federal program. The regulatory elements of the RGGI program (including implementing regulations at the state level) must be superseded by national regulatory elements so as not to have redundant and possibly conflicting programs.

The GHG Coalition commends the Signatory States for including this concept in the RGGI MOU. However, the MOU provisions states “When a federal program is proposed, the Signatory States will advocate for a federal program that rewards states that are first movers. If such a federal program is adopted, and it is determined to be comparable to this Program, the Signatory States will transition into the federal program.” How the Signatory States will define “comparable” concerns the GHG Coalition.

The GHG Coalition recommends the following changes be considered to the RGGI MOU and added to the draft model rule:

1. when a mandatory federal program is adopted that results in greater CO₂ emissions reductions than RGGI, the RGGI program will transition to that program so as not to economically disadvantage CO₂ budget sources or the regional economy; and
2. CO₂ budget sources will be credited with emission reductions achieved through RGGI as the region transitions to the federal program.

The GHG Coalition’s detailed comments and recommendations are outlined in the attached appendix by section of the draft model rule. Member companies are interested in discussing these recommendations with all RGGI Signatory States and RGGI stakeholders so that the final model rule serves to provide a standardized approach for individual state regulations of all of the

critical issues to minimize any distortions to the regional electricity markets, minimize the costs of the program to consumers and CO₂ budget sources and to ensure a well functioning emissions trading market.

Appendix A

This is an Appendix to the Northeast Regional Greenhouse Gas Coalition's (GHG Coalition) memo date May 22, 2006 entitled *Comments and Recommendations in Response to RGGI Draft Model Rule*. In addition to the recommended policy changes, this Appendix contains the GHG Coalition's recommended changes to the RGGI draft model rule language date March 23, 2006.

Subpart XX-1 CO₂ Budget Trading Program General Provisions

XX-1.2 Definitions

(F) Biomass.

The definition of eligible biomass is too stringent and serves to preclude some sources of biomass that could be co-fired in existing units. Biomass materials that can be beneficially reused as fuel should be eligible as they are renewable fuels that replace use of fossil fuels, their combustion does not create additional greenhouse gas emissions, and they can be combusted in regulated units that meet all applicable Clean Air Act requirements. The GHG Coalition recommends the following modified version of the RGGI model rule biomass definition indicated below:

Eligible biomass includes organic fuel stocks including technologies that use unadulterated and non-construction and demolition debris ~~fuel stocks~~, biogenic municipal waste, which includes: brush, stumps, lumber ends and trimmings, wood and wood wastes and residues, wood pallets, bark wood chips, shavings, sawdust and slash; or fuel from energy crops; syn-gas, biogas and liquid biofuels.

(aa) Consumer benefit or strategic energy purpose account.

The definition of consumer benefit or strategic energy purpose account should be the same for every RGGI Signatory State as outlined in the RGGI MOU. The RGGI MOU reads as follows:

“each Signatory State agrees that 25% of the allowances will be allocated for a consumer benefit or strategic energy purpose. Consumer benefit or strategic energy purpose include the use of the allowances to promote

energy efficiency, to directly mitigate electricity ratepayer impacts, to promote renewable or non-carbon emitting energy technologies, to stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and/or fund administration of this Program.”⁵

(ab) Continuous emission monitoring system or CEMS.

This definition of CEMS and the requirements under Subpart XX-8 appear to establish new requirements for the installation of monitoring equipment for some CO₂ budget sources. In particular, units such as oil and gas fired peaking units and combustion turbines are not currently required to install these types of monitoring equipment as defined in this definition. These units utilize 40 CFR Part 75 Appendices (E and G) to quantify emissions and should continue to be allowed to do so in RGGI.

This definition of CEMS should be simplified through an amendment as follows:

The equipment required under Subpart XX-8 to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated DAHS), a permanent record of stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration (as applicable), in a manner consistent with 40 CFR Part 75 and Subpart XX-8. The following systems are the principal types of continuous emission monitoring systems required under Subpart XX-8 (as applicable).

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

~~(2) A nitrogen oxides emission rate (or NOX diluent) monitoring system, consisting of a NOX pollutant concentration monitor, a diluent gas (CO₂ or O₂) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NOX~~

⁵ As noted in its comments, the GHG Coalition also believes that the consumer benefit allocation could be used to create allowances for new sources.

~~concentration, in parts per million (ppm), diluent gas concentration, in percent CO₂ or O₂; and NO_X emission rate, in pounds per million British thermal units (lb/MMBtu);~~

(23) A moisture monitoring system, as defined in 40 CFR 75.11(b)(2) and providing a permanent, continuous record of the stack gas moisture content, in percent H₂O; and

(43) A carbon dioxide monitoring system, consisting of a CO₂ pollutant concentration monitor (or an oxygen monitor plus suitable mathematical equations from which the CO₂ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO₂ emissions, in percent CO₂; or~~and~~

(5) An oxygen monitoring system, consisting of an O₂ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O₂, in percent O₂.

(ad) Excess emissions.

This definition should be revised. As it reads currently in the draft model rule, CO₂ budget sources whose emissions are higher than the emissions allocated to it (at most 75% of its baseline assuming a 25% CBA) would face penalties. The GHG Coalition recommends that the definition of excess emissions be change to read as follows and that reference to excess emissions throughout the draft mode rule be addressed in light of this change in definition:

Any tonnage of CO₂ emitted by a CO₂ budget unit during a control period, minus those tons attributable to biomass co-firing, that exceeds the CO₂ allowances available for compliance deductions in the source's compliance account as of the CO₂ allowance transfer deadline,~~the CO₂ budget emissions limitation for the unit.~~

Consistent with the GHG Coalition's recommendations in the attached memo, the definition for market settling period should be eliminated.

~~(ak) Market settling period. The first fourteen months of any control period.~~

(ar) Owner. Any of the following persons:

This definition should be changed so that the compliance obligation resides with the owners of the CO₂ budget unit and not with the entity that has a life of unit, firm power contractual arrangement. The GHG Coalition recommends the following amendments to the model rule language:

- (1) any holder of any portion of the legal or equitable title in a CO₂ budget unit; or
- (2) any holder of a leasehold interest in a CO₂ budget unit; or
- ~~(3) any purchaser of power from a CO₂ budget unit under a life of the unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the CO₂ budget unit; or~~

(ax) Spot price.

The definition of spot price should be changed to more accurately reflect the current definition of spot price in commodity markets. The definitions of the stage one and stage two trigger events should also provide additional detail on the methodology. The GHG Coalition recommends that the definition be changed to read as follows:

The market price for CO₂ allowances by vintage and RGGI compliance period, for a particular month as defined by the REGULATORY AGENCY or its agent, ~~calculated based on a volume weighted average of transaction prices reported to the REGULATORY AGENCY or its agent, and taking into account prices as reported publicly through reputable sources.~~

(az) *Stage one trigger event.* The occurrence of any twelve month period ~~that completely transpires following the market settling period and is~~ characterized by spot prices for CO₂ allowances, ~~calculated on a volume weighted average basis,~~ that have been equal to or greater than the stage one threshold price.

The following resources will be utilized to determine if a stage one trigger event has occurred: transactions reported to the REGULATORY AGENCY or its agent, transactions associated with

the consumer benefit or strategic energy purpose allocation, brokered transactions, bilateral transactions, and exchange transactions.

(bb) *Stage two trigger event.* The occurrence of any twelve month period ~~that completely transpires following the market settling period and is~~ characterized by spot prices for CO₂ allowances, ~~calculated on a volume weighted average basis,~~ that have been equal to or greater than the stage two threshold price.

The following resources will be utilized to determine if a stage one trigger event has occurred: transactions reported to the REGULATORY AGENCY or its agent, transactions associated with the consumer benefit or strategic energy purpose allocation, brokered transactions, bilateral transactions, and exchange transactions.

XX-1.4 Applicability.

RGGI applicability (based on the size of the electric generating unit, the quantity of biomass combusted or the percentage of electricity sold to the grid) should be uniform across the RGGI Signatory States.

(b) Limited exemption for units with electrical output to the electric grid restricted by permit conditions.

This provision should not be an optional one for every RGGI state. Instead, all units in the RGGI region that supply less than or equal to 10 percent of the annual gross generation of the unit to the electric grid should not be an affected unit under this program.

XX-1.5 Standard requirements.

(a) Permit requirements.

The CO₂ budget source permitting provisions of the draft model rule should be clarified so that they are regionally consistent across the RGGI Signatory States. The GHG Coalition recommends that the necessary RGGI provisions should be incorporated into a source's Title V permit as part of its regular renewal process.

(e) Recordkeeping and reporting requirements.

The GHG Coalition is concerned with the length of time that records are required to be kept in hard copy document format. As such, the GHG Coalition recommends the following changes to the draft mode rule language:

(1) Unless otherwise provided, the owners and operators of the CO₂ budget source and each CO₂ budget unit at the source shall keep on site at the source or at a central office location each of the following documents in hardcopy for a period of 10–5 years and for a period of 10 years electronically from the date the document is created. ~~This period may be extended for cause, at any time prior to the end of 10 years, in writing by the REGULATORY AGENCY.~~

Subpart XX-3 Permits

XX-3.1 General CO₂ budget permit requirements.

The GHG Coalition recommends the following language be added for a standardized approach to the permitting process from state to state.

(C) For existing sources, CO₂ budget permits shall be included in the source's Title V permit upon renewal.

(D) For new sources, CO₂ budget permits shall be included in the source's original Title V permit.

Subpart XX-5 CO₂ Allowance Allocations

XX-5.3 CO₂ allowance allocations.

The GHG Coalition recommends the following changes to the allowance allocations section:

(a) General allocations. [Allocation provisions will vary from state to state, provided at least 25% of the allocations will go to a consumer benefit or strategic energy purpose].

(b) Consumer benefit or strategic energy purpose allocation.

The GHG Coalition recommends the following additions to the draft mode rule language:

XX-5.3(b) Consumer benefit or strategic energy purpose allocation. The REGULATORY AGENCY will allocate twenty-five percent of the NAME OF RELEVANT RGGI STATE CO₂ trading program base budget for the 2009 through 2014 allocation years to the consumer benefit or strategic energy purpose account.

(1) By January 1, 2009, for the 2009 through 2014 allocation years, the REGULATORY AGENCY will:

- i. determine the method(s) with which the consumer benefit or strategic energy purpose allowances will be allocated; and
- ii. determine the quantity of consumer benefit or strategic energy purpose allowances that will be dedicated to each of the following categories:
 1. to promote energy efficiency,
 2. to directly mitigate electricity ratepayer impacts,
 3. to promote renewable or non-carbon emitting energy technologies,
 4. to stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and/or
 5. fund administration of this Program.

(2) By no later than December 31, 2009, the REGULATORY AGENCY will make one hundred percent of the consumer benefit or strategic energy purpose allowances for the 2009, 2010, and 2011 allocation years available to CO₂ Budget Sources or their agents only.

(3) By no later than December 31, 2010, the REGULATORY AGENCY will make any remaining consumer benefit or strategic energy purpose allowances for the 2009, 2010, and 2011 allocation years available to CO₂ Budget Sources or their agents and other participants.

(4) By no later than December 31, 2011, the REGULATORY AGENCY will make one hundred percent of the consumer benefit or strategic energy purpose

allowances for the 2012, 2013, and 2014 allocation years available to CO₂ budget sources or their agents only.

- (5) By no later than December 31, 2012, the REGULATORY AGENCY will make any remaining consumer benefit or strategic energy purpose allowances for the 2012, 2013, and 2014 allocation years available to CO₂ budget sources or their agents and other participants.

XX-5.3(c) Early reduction CO₂ allowances.

The early reduction allowance provisions of the draft model rule are overly restrictive and should be expanded to encourage reductions in CO₂ emissions at budget sources prior to the start of the program.

Total facility shutdowns should be eligible to generate early reduction allowances. The requirement that the emission rate of the unit must improve should be eliminated and only require that the unit or facility shutdown result in absolute CO₂ emissions reductions. The GHG Coalition recommends the following specific changes to the language in this section:

(c) The REGULATORY AGENCY may award early reduction CO₂ allowances (ERAs) to a CO₂ budget source for reductions in the CO₂ budget source's CO₂ emissions (inclusive of all emissions from CO₂ budget units at the CO₂ budget source) that are achieved by the source during the early reduction period (2006, 2007, and 2008), subject to the requirements of this subdivision. Total facility shutdowns shall be eligible for ERAs ~~not be eligible for ERAs~~.

(3) The REGULATORY AGENCY will calculate the number of ERAs to be awarded to a particular CO₂ budget source for the early reduction period pursuant to one of the following methodologies:

Finally an "OR" should be inserted between the methodology in (c)(3)(i) and (c)(3)(ii).

Furthermore, the GHG Coalition recommends that provisions be added within a new section (XX-5.3(d)) to the RGGI model rule that provides the authority to the regulatory agency to award allowances for total facility shutdowns that occur after the start of the program. The new

section should clearly outline the methodology that the regulatory agency shall utilize taking into account the electricity system impacts of the shutdown.

Subpart XX-6 CO₂ Allowance Tracking System

XX-6.5 Compliance.

(a) Allowances available for compliance deduction.

The GHG Coalition proposes that following changes be made to the draft model rule language as outlined below:

(3) For CO₂ offset allowances, the number of CO₂ offset allowances that may be deducted can be no more than the number of tons representing the following percentages of the CO₂ budget source's CO₂ emissions for that control period as determined in accordance with Subpart 8:

(i) unless the provisions of subparagraphs (ii) or (iii) of this paragraph apply, ~~3-3-5~~ percent;

~~(ii) if the REGULATORY AGENCY determines that there has been a Stage One Trigger Event, 5 percent;~~

(iii) if the REGULATORY AGENCY determines that there ~~have~~ has been ~~at least two a~~ Stage Two Trigger Events ~~in immediate succession,~~ 15 percent, and

(iv) if the REGULATORY AGENCY determines that there have been at least two Stage Two Trigger Events in immediate succession 20 percent.

~~(a) 5 percent of the CO₂ budget source's CO₂ emissions for the first three years of the control period, and~~

~~(b) 20 percent of the CO₂ budget source's CO₂ emissions for each year after the third year of the control period.~~

XX-7.1 Submission of CO₂ allowance transfers.

The GHG Coalition recommends that any allowance price data that is reported to the regulatory agency or its agent be held confidential and only be used to implement the safety valve triggers and or during the evaluation of the Program. The Coalition notes that this section would be unnecessary if the model rule relied upon publicly available indices.

The GHG Coalition recommends the addition of the following language under XX-7.1(e).

(e) the purchase or sale price of the allowance that is the subject of a sale or purchase transaction under subdivision (d) of this section subject to the following:

(1) the purchase or sale price of the allowance is confidential and held by the REGULATORY AGENCY or its agent as such, and

(2) the purchase or sale price information is only utilized by the REGULATORY AGENCY or its agent for the implementation of the safety valve triggers of the Program and or evaluation of the Program.

Subpart XX-8 Monitoring and Reporting

GHG Coalition recommends that CEMs monitoring should harmonize with Title IV (40 CFR 75) and NSPS Subparts Da, GG, and KKKK to reduce the burden on owners and operators. This includes the reporting of gross output (MWe and steam) as is done in present EDRs, not net output as outlined in the draft model rule. All attempts should be made by the RGGI Signatory States to ensure all required data can be submitted with one EDR, not two as presently being discussed.

Subpart XX-9 RESERVED (ELECTRICITY IMPORTS AND EMISSIONS LEAKAGE)

The GHG Coalition recommends that this reserved section be utilized for imports and leakage.

XX-9.1 [RESERVED] Purpose.

XX-9.2 [RESERVED] Definitions.

XX-9.3 [RESERVED] Applicability.

XX-9.4 [RESERVED] Standard Requirements.

XX-9.5 [RESERVED] Monitoring and Reporting.

Subpart XX-10 CO₂ Emissions Offset Projects

XX-10.3 General requirements

The GHG Coalition recommends that the following language be inserted:

XX-10.3(a) Minimum eligibility requirements. At a minimum, eligible offsets shall consist of action that are:

- (1) Real. A greenhouse gas emission reduction and/or carbon sequestration is real if it is a reduction and/or sequestration in actual emissions, resulting from a specific and identifiable action or undertaking, net leakage of emissions.
- (2) Surplus. A greenhouse gas emission reduction and/or carbon sequestration is surplus if it is in addition to what is required by all applicable municipal, state and federal laws at the time the project is implemented.
- (3) Verifiable. A greenhouse gas emission reduction and/or carbon sequestration is verifiable by a third party through regular and transparent monitoring, reporting, and recordkeeping to ensure its credibility.
- (4) Permanent. A greenhouse gas emission reduction and/or carbon sequestration is permanent if the emissions are removed from the atmosphere for the duration of the offset allowance award; and
- (5) Enforceable. A greenhouse gas emission reduction and/or carbon sequestration is enforceable if an agreement between two or more parties clearly assigns ownership of the offsets.

(b) Eligible CO₂ emissions offset projects.

The current short list of eligible project categories should be added to in order to include

- fossil fuel switching (in the residential, commercial and industrial sectors) as a standalone category,

- the industrial sector in the end use fuel efficiency category; and
- to expand the eligible offset project categories over time.

As such, the GHG Coalition recommends that the following language be inserted:

(b)(7) Fuel switching from higher carbon fuels to lower carbon fuels; and

(b)(8) Additional types of CO₂ equivalent emissions offset projects that have satisfied all the applicable requirements of this Subpart (including the minimum eligibility requirements outlined in XX-10.3(a)) will be added over time upon approval by the REGULATORY AGENCY.

(d) General Additionality Requirements.

The GHG Coalition recommends the following specific changes to the model rule language:

(2)(i) Projects may ~~not~~ receive funding or other incentives from any systems benefit fund, or funds provided through the consumer benefit or strategic energy purpose allocation required pursuant to subdivision XX-5.3(b) provided that the offset award is only attributed to the incremental financial contribution above and beyond SBC or other funding-

(2)(ii) If a project includes an electric generation component (other than a landfill gas to energy project or agricultural methane to energy project), the project sponsor shall transfer legal rights to any and all attribute credits generated from the operation of the project, other than CO₂ emissions offset allowances issued under section XX-10.7, that may be used for compliance with a renewable portfolio standard or other regulatory requirement, to the REGULATORY AGENCY or its agent.

(e) Maximum crediting period for CO₂ emissions offset projects. The REGULATORY AGENCY may award CO₂ offset allowances under section XX-10.7 for any CO₂ emissions offset project for no more than ten allocation years for non sequestration projects and no more than 20 years for sequestration projects, provided the REGULATORY AGENCY may award CO₂ offset allowances for an additional ten allocation years for non sequestration projects and additional 20 allocation years for sequestration projects upon a demonstration by the project sponsor that the CO₂ emissions offset project meets all the applicable requirements of this

Subpart for such projects at the end of the first ~~ten-year crediting~~ period. Prior to the extension of the crediting period, the project sponsor must submit a consistency application pursuant to section XX-10.4 and receive a consistency determination from the REGULATORY AGENCY pursuant to paragraph XX- 10.4(e)(2).

The GHG Coalition views the project commencement date for defining eligible projects as overly restrictive, which will penalize companies that have undertaken voluntary actions to reduce greenhouse gas emissions. As such, the GHG Coalition recommends XX-10.3(f) be amended as follows:

(f) Timing of Projects. The REGULATORY AGENCY may award CO₂ offset allowances under section XX-10.7 ~~only~~ for:

(i) CO₂ emissions offset projects that are initially commenced on or after December 20, 2005; ~~or~~

(ii) for CO₂ emissions offset projects that were commenced prior to December 20, 2005 and produces new offsets after that date in accordance with the baseline established for that offset category.

XX-10.5 CO₂ emissions offset project standards.

Some project specific provisions of the draft model rule are unnecessarily restrictive and should be changed.

(b) Reduction in emissions of sulfur hexafluoride (SF₆).

The approach to SF₆ penalizes companies that have made investments to reduce emissions as part of the EPA SF₆ Partnership. Additional SF₆ mitigation will come at an increased cost to these companies. Accordingly, the model rule should remove all additionality requirements, excluding regulatory, for SF₆ offset projects.

The GHG Coalition recommends the following changes to XX-10.5 (b)(1):

(i) ~~The project sponsor shall detail the incremental actions to be taken, beyond actions taken during the baseline year, to achieve a reduction in emissions of SF6 relative to the transmission and/or distribution entity's emissions in the baseline year. These actions may include an expansion of existing actions, provided the applicant details the scope of proposed expanded activities.~~ The identified actions to be taken shall be consistent with the guidance provided in International Electrotechnical Commission (IEC) 1634, "High-voltage switchgear and control gear – Use and handling of sulfur hexafluoride (SF6) in high-voltage switchgear and control gear," (CEI/IEC 1634, 1995-04), and Electric Power Research Institute (EPRI), "Practical Guide to SF6 Handling Practices," (TR-113933, 2002).

(c) Sequestration of carbon due to afforestation.

The afforestation discount of carbon sequestration of 20% should be eliminated. There are a few options that have been discussed by stakeholders to address this issue. The first are insurance products available in the market currently to protect against the loss of carbon sequestration due to fire or other catastrophic loss. The insurance would provide some replacement carbon in the event that the project incurs a loss. The other option involves that creation of a new category of RGGI offset – a temporary offset allowance – that would need to be replaced in the future.

(d) Reduction or avoidance of CO₂ emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency.

The category omits the industrial sector due to the difficulty encountered with establishing performance standards for the sector. The GHG Coalition recommends that this sector be included as eligible.

Fossil fuel switching in the residential, commercial and industrial sectors should be a stand alone project category for which a standard should be developed.

(f) [RESERVED] Reduction in emissions from natural gas transmission and distribution equipment.

RGGI should collaborate with the Interstate Natural Gas Association⁶, the American Petroleum Institute⁷, the International Petroleum Industry Environmental Conservation Association⁸, and the California Climate Action Registry⁹ in the development of the approach to offsets for the natural gas transmission and distribution category.

RGGI Signatory States should develop and release to the public draft requirements for the natural gas transmission and distribution offset category and make those requirements available for public comment prior to inclusion in the final model rule.

XX-10.7 Award of CO₂ offset allowances.

The GHG Coalition recommends the following changes to the language in the draft model rule:

(a) Quantities of CO₂ offset allowances awarded.

(1) CO₂ emissions offset projects. Following the issuance of a consistency determination under paragraph XX-10.3(e)(2) and the approval of a monitoring and verification report under the provisions of subdivision (d) of this section, the REGULATORY AGENCY will award quantities of CO₂ offset allowances to a project sponsor as follows:

~~(i) If the project sponsor timely filed the monitoring and verification report prior to the declaration of either a Stage One Trigger Event or Stage Two Trigger Event during the current control period,~~

~~(a) one CO₂ offset allowance will be awarded for each ton of demonstrated reduction in CO₂ emissions or CO₂ equivalent or sequestration of CO₂ from eligible CO₂ emissions offset projects that was undertaken within a Participating State, and~~

~~(b) one CO₂ offset allowance will be awarded for two tons of demonstrated reductions in CO₂ emissions or CO₂ equivalent or sequestration of CO₂ from a CO₂ emissions offset project that was undertaken within any State that is not a~~

⁶ Interstate Natural Gas Association of America, (INGAA), *Greenhouse Gas Emission Guidelines for Natural Gas Transmission and Storage: Volume 1 – Emission Estimation Methodologies and Procedures, Revision 2*, September 28, 2005. <http://ingaa.org/environment/Climate.htm>

⁷ American Petroleum Institute (API), *Compendium of Greenhouse Gas Methodologies for the Oil and Gas Industry*, February 2004. www.api.org

⁸ International Petroleum Industry Environmental Conservation Association, *Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions*, Published: 2003. <http://www.ipieca.org/> IPIECA is also currently working on a project protocol.

⁹ California Climate Action Registry, Natural Gas Protocol Workshop Proceedings from its 2006 conference. www.climateregistry.org/EVENTS/Conference/

~~Participating State.~~

~~(ii) If the project sponsor timely filed the monitoring and verification report on or after the declaration of a Stage One Trigger Event but before the declaration of Stage Two Trigger Event during the current control period, one CO₂ offset allowance will be awarded for each ton of demonstrated reduction in CO₂ emissions or CO₂ equivalent or sequestration of CO₂ from a CO₂ emissions offset project that was undertaken within any State, Mexico, or Canada.~~

Subpart XX-11 Safety Valve Trigger Methodology

The GHG Coalition recommends that a new Subpart be added to the model rule that details the safety valve trigger methodology after consultations with market experts.

XX-11.1 [RESERVED] Purpose.

XX-11.2 [RESERVED] Definitions.

XX-11.4 [RESERVED] Market Monitoring and Data Gathering Methodology.

XX-11.5 [RESERVED] Determination of a Trigger Event

Subpart XX-12 Harmonization with a Federal Program

The GHG Coalition strongly contends that when a mandatory federal climate change program is implemented, RGGI must harmonize with that federal program. The regulatory elements of the RGGI program (including implementing regulations at the state level) must be superseded by national regulatory elements so as not to have redundant and possibly conflicting programs.

The GHG Coalition recommends the addition of the following Subpart in the model rule:

XX-12 Harmonization with a Federal Program. When a mandatory CO₂ emission reduction program is adopted at the federal level in the United States, The REGULATORY AGENCY will harmonize the CO₂ Budget Trading Program with that federal program.