



UNITED STATES COMBINED
HEAT & POWER ASSOCIATION

May 22, 2006

Staff Working Group
Regional Greenhouse Gas Initiative

Dear Staff Working Group:

The United States Combined Heat and Power Association (USCHPA) and the Business Council for Sustainable Energy (the Council) are pleased to offer the following comments on the RGGI draft Model Rule released March 15, 2006. The USCHPA is a private, non-profit association, formed in 1999 to promote the merits of combined heat and power (CHP) and achieve legal recognition and public policy support for CHP. The Council was created in 1992 and its members span the energy spectrum. It represents companies and trade associations in the wind, solar, hydropower, energy efficiency, natural gas and insulation industries. The Council promotes public policies that reduce the environmental footprint of energy production and use, while encouraging economic growth and energy independence for the United States.

The topic of these comments is the formulation of the early reduction credit provisions. Our concern is the formula for calculating credit, shown on page 41 of the rule. As currently formulated, the only emission reduction action that can receive credit is fuel-switching, while efficiency improvement is systematically excluded from receiving credit under this provision. The reason for this is the input-based formulation of the rule. The problem can be fixed by re-casting the provision on an output-basis.

There are three generic ways to reduce CO₂ emissions from fossil-fuel processes:

- Reduce utilization
- Increase efficiency
- Switch to lower carbon fuel

RGGI has made clear that reduced utilization will not receive credit under the early reduction provisions. Fuel-switching can provide genuine emission reductions, however at a very high cost (\$30/ton or more) and potentially exacerbating regional concerns over fuel-diversity. Increased efficiency is the lowest cost and most widely applicable approach to CO₂ reduction and one that RGGI has often endorsed as a vital component of its plans. We are therefore surprised that the proposed regulation systematically excludes energy efficiency as an option.

Early Reduction Allowances (ERAs) can be awarded under the proposal for operation during early reduction period of 2006-2008 compared to operation during the baseline period of 2003-2005. As currently formulated, the ERA calculation considers two cases:

- If heat input during the early reduction period is less than or equal to the heat input during the baseline period, the ERAs are equal to the early reduction period heat input times the reduction in the input-based emission rate (lb/MMBtu) from the baseline to the early reduction period.
- If the heat input during the award period is higher than during the baseline period, the ERAs are equal to the decrease in absolute emissions from the baseline to the early reduction period.

These calculations provide ERAs for a facility that switches to a lower carbon fuel (e.g. coal to gas). However, they provide no credit for a facility that reduces its emissions through increased efficiency. This can be demonstrated through several examples:

- If the facility increases its generating efficiency and continues to generate the same amount of electricity, its heat input (and emissions) will decline between the baseline and early reduction periods. However, the input-based emission rate (lb CO₂/MMBtu) does not change, since it is dependent only on the fuel characteristics. Thus, though the plant has made a real reduction in emissions, it cannot get any ERAs because there is no change in emission rate.
- If the facility increases its generating efficiency and increases its output, there are three possible outcomes:
 - First there is a range of operation in which the heat input is still lower than the baseline and the unit receives no credit as in the first case.
 - There could be a small window at which there is an absolute reduction and the unit could get ERAs.
 - Beyond that, no ERA's are available even though the emission rate is lower.

The results of the last sub-case are partly a manifestation of RGGI's determination that ERAs should only be available to a unit that makes both a rate reduction and an absolute reduction. The same limitation applies to fuel switching. It's not clear to us why RGGI does not want to encourage the increased use of lower emitting units through the early reduction provision. This provision will have a limiting effect on all early reduction actions since plant operators will not know the future level of plant operation and will be reluctant to make early reduction investments if they do not know whether they will be creditable or not.

That said, our concern is not so much with the specifics or even the existence of the early reduction provision as with the lack of focus on energy efficiency as a compliance mechanism. As noted above, energy efficiency is widely recognized as a critical component of a successful RGGI strategy. Yet in the one place in the model rule in which it could have been incorporated, it has been neglected. As a reflection of RGGI's

commitment to energy efficiency and a guidepost for state implementation of the Model Rule, this is a red flag.

On the hope that this formulation is simply an oversight rather than a policy statement, we offer the following simple fix to the problem by converting section xx-5.3(c)(3)(i) and (ii) to an output basis that automatically reflects improved efficiency:

xx-5.3 (c)(3)

(i) If total heat input from all CO₂ budget units at the CO₂ budget source during the early reduction period is less than or equal to the total heat input from all the CO₂ budget units at the CO₂ budget source during the baseline period:

$$\text{ERAs} = ((\text{AER}_{\text{BASELINE}} - \text{AER}_{\text{ERP}}) \times \text{MWh}_{\text{ERP}})/2000$$

where:

“AER_{BASELINE}” is the average CO₂ emission rate for all of the CO₂ budget units at the CO₂ budget source during the baseline period (in pounds/MWh);

“AER_{ERP}” is the average CO₂ emission rate for all of the CO₂ budget units at the CO₂ budget source during the early reduction period (in pounds/MWh); and

“MWh_{ERP}” is the total electric output from all CO₂ budget units at the CO₂ budget source during the early reduction period (in MWh).

(ii) If total heat input from all the CO₂ budget units at the CO₂ budget source during the early reduction period is greater than the total electric generation from all the CO₂ budget units at the CO₂ budget source during the baseline period:

$$\text{ERAs} = \text{E}_{\text{BASELINE}} - \text{E}_{\text{ERP}}$$

where:

“E_{BASELINE}” are total CO₂ emissions from the all of the CO₂ budget units at the CO₂ budget source during the baseline period (in tons); and

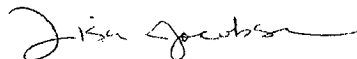
“E_{ERP}” are total CO₂ emissions from the all of the CO₂ budget units at the CO₂ budget source during early reduction period (in tons).

This approach provides credit for both fuel-switching and efficiency improvement while maintaining RGGI’s interest in recognizing only absolute and rate reductions. More importantly, it sets an example of regulation that recognizes and rewards increased efficiency through output-based regulation. This could also be improved by including the efficiency effects of CHP through recognition of the thermal output of CHP retrofit projects during the early reduction period.

Increased efficiency will be a critical requirement for successful implementation of the RGGI program and it must be incorporated into the structure of the RGGI regulations from the outset. We hope that the Model Rule will lead the way in this important respect. We appreciate the opportunity to submit these comments and would be glad to respond to any questions related to them. If you have any questions, please feel free to

contact Lisa Jacobson of the Council at (202) 785-0507 or via email at ljacobson@bcse.org or Thor Ketzback of the USCHPA at (312) 807-4437 or tketzback@bellboyd.com.

Sincerely,



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May 22, 2006

Staff Working Group
Regional Greenhouse Gas Initiative

Dear Staff Working Group:

The United States Combined Heat and Power Association ("USCHPA") respectfully submits the following comments regarding the CO2 Emissions Offset Projects standards contained within Subpart XX-10 ("Offset Provisions") of the Regional Green House Gas Initiative's ("RGGI") Model Rule. The USCHPA is a private, non-profit association, formed in 1999 to promote the merits of CHP and achieve legal recognition and public policy support. The USCHPA has previously submitted comments regarding how support for local clean generation within the Model Rule can advance RGGI's goal of lowering the greenhouse gas levels and support the RGGI region's economy.

USCHPA commends RGGI for the accomplishments it has made to date with regard to developing the Model Rule and incorporating CHP considerations in certain aspects of the Model Rule. There are, however, aspects of the Model Rule that can be improved. One area of the Model Rule that USCHPA believes can be improved are the Offset Provisions, which potentially provide for offset allowances to small CHP generators not covered under the general allocation scheme.

The Offset Provisions within the Model Rule reward projects that reduce or prevent greenhouse gas emissions. Offset projects ("Offset Projects") recognized under the Offset Provisions include landfill methane capture and destruction and projects that reduce or avoid CO2 emissions from fuel combustion due to end-use energy efficiency ("End-Use Efficiency Projects"). USCHPA supports the inclusion of Offset Projects within the Model Rule. As discussed below, certain criteria within the Offset Provisions of the Model Rule, however, appear to unnecessarily restrict the availability of offset allowances for Offset Projects and may create a disincentive for such projects.

The Offset Provisions prevent Offset Projects from receiving offset allowances where those projects "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). See XX-10.3(d)(2)(i). The term "systems benefit fund" is undefined and if broadly applied may exclude numerous CHP projects that already (or may in the future) receive other sources of funding. Excluding certain funding for Offset Projects also creates uncertainty for project developers and the potential for significant financial loss. Because the RGGI framework is in its infancy and states have substantial discretion in allocating funding for various interests, project developers may be forced to predict and choose whether RGGI or other state funding alternatives offer them greater value. Consequently, project developers may forgo engaging in Offset Projects under RGGI and/or states may be disinclined to develop additional funding programs for clean generation. A better approach would be to evaluate

Offset Projects based on the RGGI Memorandum of Understanding criteria and individual project merit rather than restricting potential funding options. This approach would reduce uncertainty for potential project developers and continue to provide states with flexibility in their allocation decisions.

The Offset Provisions relating to End-Use Efficiency Projects prohibit CHP projects that generate electricity from receiving offset allowances. See XX-10.3(d)(1)(viii). End-Use Efficiency Projects¹ should not be precluded from producing electricity (or increasing usage of natural gas) as certain CHP systems are designed to lower greenhouse gas emissions while generating electricity (and thermal energy) in an energy-efficient manner. Instead, the Model Rule should reward energy-efficient electrical output and thermal efficiency. This approach would achieve the overall RGGI program goal of lowering greenhouse gas emissions while creating sustainable and energy-efficient energy capacity and help prevent energy capacity leakage from the RGGI region.

The requirement that End-Use Efficiency Projects only comprise five percent of the market creates a disincentive for CHP growth within the RGGI region. See XX-10.3(d)(3). As discussed within this letter, clean generation which lowers greenhouse gas emissions while maintaining energy capacity within the RGGI region should be encouraged and USCHPA intends to see the market share of CHP projects significantly grow over time.

Finally, the Staff Working Group should consider closely coordinating the Model Rule and Offset Provisions with other programs designed to reduce greenhouse gas emissions. For example, the Model Rule precludes an Offset Project from obtaining offset allowances if the project developer participates in other "mandatory or voluntary greenhouse gas program[s] or market[s]." See XX-10.3(d)(2)(iii). This provision may unnecessarily devalue the RGGI offset allowance or emission reduction credits issued under other programs. Coordination between the RGGI program and future greenhouse gas emissions frameworks will also ensure that the integrity of the offset allowances issued under the RGGI program and that the RGGI market is not compromised.

¹ USCHPA assumes that "commercial building" relating to End-Use Efficiency Projects is broadly interpreted to include industrial buildings. If that assumption is inaccurate, please clarify the meaning of "commercial building."

USCHPA's view is that CHP projects play an increasingly prominent role in reducing greenhouse gas emissions. USCHPA appreciates the opportunity to provide comments and requests that RGGI modify the Model Rule to reflect the issues raised within this letter. Please contact me with any questions at (312) 807-4437 or tketzback@bellboyd.com. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thor W. Ketzback', followed by a long horizontal flourish line.

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