



May 23, 2006

Franz Litz, Esq.  
Chair of Regional Greenhouse Gas Initiative and  
Senior Attorney  
NYS Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233

Dear Mr. Litz:

Enclosed are the written comments of Ridgewood Power Management to the draft RGGI Model Rules.

Sincerely,

Stephen Galowitz  
Vice President, Business Development  
Ridgewood Renewable Power LLC

CC: William P. Short, III  
Maria Haggerty

**RECOMMENDATIONS  
TO  
THE STATES  
IN FINALIZING  
REGIONAL GREENHOUSE GAS INITIATIVE  
MODEL RULES**

**Submitted By  
Ridgewood Power Management, LLC  
May 22, 2006**

Ridgewood Power Management ("Ridgewood") hereby submits the following recommendations to the states in finalizing the regional greenhouse gas initiative ("RGGI") model rules ("Model Rules"):

Waste heat/pressure to power should be added to the list of qualified offsets.

The use of waste heat/pressure to produce electrical or mechanical power has the potential to dramatically reduce GHG emissions. Through the use of waste heat/pressure, power can be produced with zero additional energy input and zero emissions. This form of power is often referred to as "recycled energy power generation." Producing more power using the same fossil fuel creates carbon benefits no less than producing the same power with less fossil fuel. This concept needs to be explicitly recognized in the rules. In addition, many of these opportunities exist at pipeline compressor stations and would reduce the amount of methane (i.e. natural gas) consumed by the pipeline distribution system. The emissions benefits from this technology meet all of the offset criteria established in the MOU:

- Real
  - Waste heat/pressure to power is real. Assuming that appropriate safeguards are implemented to ensure that the heat/pressure is truly "wasted", electrical or mechanical power can be produced with no incremental fuel or emissions.
- Surplus
  - Waste heat/pressure to power is generally ignored and fails to receive appropriate environmental incentives and support because it does not fit neatly into the category of either "renewable energy" or "energy efficiency". Because waste heat/pressure is usually generated using fossil fuels, it is often excluded from renewable portfolio standards. In fact, it can be demonstrated that it is more environmentally beneficial than almost all accepted forms of renewable energy. In addition, because it does not reduce the energy input or emissions output at the site, most energy efficiency incentives fail to apply. The emissions benefits from producing more useful work from a given quantity of energy/emissions is no less than the emissions benefits from producing the same amount of work using less energy/emissions.
  - Because this energy/emissions-free source of recovered energy does not receive RFP funding in most states, it is critical that its ability to produce emissions benefits be recognized in the RGGI system.
  - It is relatively easy to ensure that projects meet the surplus standard (See sample language attached)
- Verifiable
  - Waste heat/pressure to power is completely verifiable by metering the power output and providing each MWh produced with an offset credit equal to the system average emissions associated with a MWh in the region.
- Permanent and Enforceable
  - The permanence and enforceability of these projects are not problematic. If the system is not operating and producing energy/emissions-free power, then it would receive no offset credits.

#### Receipt of SBC and RPS funds should not preclude RGGI participation

To begin with, the SBC and RPS programs are not simply carbon reduction programs. Each of these programs has many other goals, including technology and economic development, energy independence, grid stability, etc. . . . Many projects may serve more than one goal and should therefore be eligible for multiple program benefits. Second, this rule will create a trap for the unwary since the receipt of de minimis amounts of project incentives for feasibility studies or ancillary project costs could inadvertently result in the disqualification of an offset project from the RGGI program. Third, this prohibition will add substantial risk to the development of potential offset projects. For example, the RPS market in some jurisdictions (e.g. Connecticut) has proved to be highly volatile and projects that depended on anticipated revenue streams from the RPS program may suffer severe financial hardship in some years. Fourth, the receipt of SBC or RPS incentive funds is not a good proxy for financial additionality. Many environmentally beneficial projects are not financially feasible without the receipt of multiple revenue streams. A quick survey of renewable project developers will quickly demonstrate that this industry sector is not reaping windfall profits. Adopting this overly parsimonious approach to RGGI offsets is counterproductive and ill advised. At the very least, smaller projects, which are harder to finance and more difficult to justify financially, should be exempted from this prohibition. Accordingly, while Ridgewood opposes any financial additionality test, projects that are smaller than 10 MW should receive a presumption that they are “additional” and should be permitted to participate in SBC, RPS and RGGI programs.

#### LFG generation should create credits for emissions from marginal generation

Landfill gas (methane) reductions are specifically enumerated in the MOU as being eligible for offset credits. However, by limiting qualification to landfills that “are not subject to the New Source Performance Standards,” the model rules virtually eliminate this category of offset entirely. Presumably, this restriction was proposed in order to ensure that emissions reductions met the “surplus” test. However, this restriction is overbroad and is counter to the clear intent of the MOU. In order to be consistent with the intent of the MOU, while simultaneously ensuring that emissions reductions are “surplus”, each MWh of landfill gas to electric generation should generate emissions offsets equal to the average system-wide emissions per MWh for the region. This would appropriately value the incremental benefit associated with generating electricity from landfill gas, rather than using a combustion flare to destroy the methane.

#### Industrial sites should be added to end use efficiency opportunities for offsets

The Model Rules limits end use efficiency offset opportunities to residential and commercial projects. To begin with, this narrow definition is not supported by the language of the MOU, which makes no distinction between end use efficiency opportunities. Second, end use efficiency opportunities in the industrial sector have more potential to produce meaningful results and are easier to implement because of the greater energy sophistication of this sector. Finally, according to the materials and analysis disseminated at the March 23 and May 2 meetings, the industrial sector will bear the greatest projected price increase as a result of the RGGI. Accordingly, it would be inappropriate for this sector to be hit hardest with price increases and also for the sector to be precluded from participating in opportunities to benefit financially from emissions reduction opportunities. There is no reason that it should be harder to define the emissions baseline for the industrial sector.

RGGI must be designed to ensure EU reciprocity

It is unclear from the prior presentations whether the RGGI model rules were designed with the intent to ensure EU reciprocity. The EU carbon markets are anticipated to provide lucrative opportunities in the near future. The RGGI market must be designed to permit northeastern projects to qualify for participation in the EU markets. Without this ability, RGGI participant states will not be maximizing the benefits for the citizens and businesses in the region.

Electric generators that fail to comply with the emissions limits should pay financial penalties

The proposed model rules provide that electric generators that fail to comply with the emissions limits will be subject to a penalty equal to the loss of allowances equal to three times the amount of the deficit. However, there is no mechanism for forcing a generator to pay financial penalties for continuing failures to comply. As a result, noncompliant generators may be permitted to build large deficit emissions balances for extended periods of time. Eventually, a noncompliant generator with a large deficit balance could decommission and go out of business without incurring any financial penalty whatsoever.

The NePool GIS, PJM GATS and NY REACTS emissions data should be used for tracking the environmental attributes of each MWh of generation.

The NePool GIS, PJM GATS and NY REACTS systems each track the environmental attributes for each MWh of generation. This data should be used for the RGGI process in order to maintain consistent data. If a separate RGGI air emissions system were to be created, then, in order to avoid duplication and inconsistency, the air emissions reporting requirements in these other trading systems should be eliminated and the RGGI system should be adopted for all purposes.

Forest Wood Biomass Electric Generation should receive methane destruction credits.

Forest wood biomass that is permitted to die and decay on the forest floor releases methane during the process of decomposition. Electric generation facilities fueled by forest wood biomass combust this forest biomass and avoid the production of methane. Accordingly, each MWh of energy produced by a forest wood biomass facility should receive credit for the demonstrable quantity of methane destroyed.

## **Sample Language To Define Recycled Energy Power Generation**

The term 'recycled energy power generation" means electrical or mechanical power produced from a modification of an existing industrial or commercial system that was in place at the time of enactment of this provision

- (I) that recaptures energy that would otherwise be wasted from sources including but not limited to
  - (i) waste heat from industrial processes, natural gas compressor stations, and other sources
  - (ii) pressure in a fluid or gas system including but not limited to steam, natural gas, and water
  - (iii) blast furnace, coke oven, carbon black, and petrochemical process waste gas, pollution control projects including but not limited to thermal oxidizers, and gas flares
- (II) Equipment and technologies including but not limited to
  - (i) back-pressure turbines in parallel with existing pressure-reducing valves in steam, water and gas systems
  - (ii) organic Rankine, Stirling, or Kalina cycle heat engine systems driven by waste heat, and
  - (iii) heat recovery steam generators with steam turbine generators that recover waste heat
- (III) which are placed in service after \_\_\_\_\_