

# The RGGI Auction Allocation Process: Concerns and Recommendations

Presented by  
James H. Savitt, Ph.D

To

The RFF Auction Workshop in NYC

20 July 2006

# Observation

- The allocation of CO<sub>2</sub> allowances affects the use of **Generation Capacity** in the following ways:
  - Investment in new capacity.
  - Power purchase agreements for new and existing capacity.
  - The sale and procurement of installed capacity (ICAP).
  - The generation of power from capacity.
  - Capacity-based system and local reliability requirements.

# Recommendations

- Initial auctions of allowances must be consummated before the seasonal ICAP cycles begin.
- (Clarification) Verify that a three-year compliance period means that any allowances issued during that period can be used to meet the emissions requirements for the entire period.
  - Consider the costs and benefits of auctioning all at once 25% of the allowances for the three-year compliance period.
- Clarify how new capacity will obtain allowances.
- Quarterly monitoring process check:
  - Prices,
  - Allowances consumed,
  - Electricity generated for the market and for reliability,
  - Weather, and other relevant information,
  - Objective:
    - Anticipate the offset trigger
    - Consider other actions to address emerging issues.

# Recommendations

- The allocation of allowances to the public benefit purpose (e.g., an auction) should not exceed 25% of the annual total.
- To help the auction develop, to protect existing contracts, and to support the current investment queue, consider having the right of first access to 2/3 of the public benefit allowances go to generator owners.

# Investment in New Capacity

- Recognize that investment decisions are made in a timeframe greater than three years ahead (planning).
- Reduce uncertainty by clarifying how new investment obtains allowances (viability).
- Revenue stream from power purchase agreements must account for allowance costs (marginal costs, profitability).

# Power Purchase Agreements

- Existing PPAs may not have CO<sub>2</sub> allowance cost adjustments built in.
- Uncertainty in the availability of allowances and in their price will tend to shorten the length of future PPAs.
- New investment that counts on PPAs becomes riskier if their length becomes shorter.
  - The increased risk may well reduce future investments, or at best, increase costs.

# Installed Capacity (ICAP)

- The timing of an allowance auction, the number of allowances in the auction, and the timeframe covered by the auction all affect the cost and amount of ICAP made available.
- Uncertainty in the availability of allowances increases the risk associated with selling ICAP, either increasing the ICAP offer price, reducing the amount offered and transacted, or both.
- Mitigation rules in NYC require that certain facilities be fully offered as ICAP.

# Generation of Power

- The CO<sub>2</sub> allowance is actually consumed when power is generated.
  - Unavailability of allowances creates uncertainty of compliance, even with a three-year window.
- Power prices will reflect the costs of the marginal unit.
  - Fuel, O&M, certain others as before.
  - Allowance costs.
  - Risks of being unable to obtain allowances.
  - Opportunity costs associated with the use of an allowance now rather than later.



# Reliability Requirements

- Load must be served consistent with NYSRC, NPCC, and NERC standards.
- Certain units must be on (or burn certain kinds of fuel) in ways not accounted for by the policy models.
  - Some units are run out of economic merit order.
  - Some units are run more often or at less efficient levels than forecast, and will consume allowances faster than anticipated.
  - Some units are subject to being run on short notice in real-time, and may not have the requisite allowances.
  - Units on for local reliability generally do not set market clearing prices and so cannot recover their operating costs directly through market prices.

# Recommendations Again

- Public benefit allocation of allowances kept at 25%.
- Clarify how new capacity will obtain allowances.
- Clarification of the three-year compliance period with respect to specific allowances.
- Initial auctions should precede the seasonal ICAP cycles.
- An auction of 25% of three years' worth of allowances with generator right of first access to 2/3 of that amount.
- Quarterly monitoring process check.