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# **Regional Greenhouse Gas Initiative: Issues for NYISO markets**



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**Environmental Advisory Council – NYISO  
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## Overview of Remarks

- **Context for thinking about RGGI at this NYISO Environmental Advisory Council meeting**
- **Overview of RGGI**
- **Questions for consideration**



## Context: the purpose of the EAC

“The Environmental Advisory Council (“EAC”) will assist the President of the NYISO in fulfilling the NYISO Board’s Environmental Policy, adopted in 2000, to:

- **Consider the environmental consequences of NYISO policies and operations and balance, as reasonably as possible, the risks of harm to the environment against the benefits to be derived from proposed actions. ...”**



## Topics for NYISO vis-à-vis RGGI

### ROLE OF NYISO?

#### INTERNAL:

- Understanding RGGI , addressing any technical implementation issues relating to NYISO's markets?
- Analyzing RGGI implications on ...
  - energy mix?
  - reliability?
  - imports / exports?
  - capacity outlook?
  - generator bidding behavior?
  - prices?
- Incorporating RGGI implications into planning (e.g., CRPP)?
- Playing a role in allowance market?



# Topics for NYISO vis-à-vis RGGI

## ROLE OF NYISO?

### EXTERNAL:

- Taking a position on RGGI design issues?
- If so, what's "given" versus "what's open"?
- Deciding when / where / if to formally comment?
- If so, what process should NYISO take in formulating its position?
- Taking an interest in ensuring common market conditions?



# Overview of RGGI

## ■ History:

- Gov. Pataki invitation to other Northeast Governors
- Stakeholder process – 2 years
- MOU signed in December 2005
- 7 states in “market” (NY, Ct, DE, ME, NH, NJ, VT)
- Model rule development and publication
  - Comments due May 22, 2006
  - Final rule expected July 2006
- State-by-state adoption (e.g., NY by regulation)
- Continuing workshop on specific issues
  - E.g., leakage – June 15-16 in Vermont
- Implementation commencing in 2009



## RGGI elements

- **Mandatory carbon emissions control program**
  - **Cap-and-trade program design**
  - **Regional cap**
    - **Hard cap on emissions by starting in 2009 (“1<sup>st</sup> compliance period”)**
    - **Stabilize emissions at 121.3 tons of CO<sub>2</sub> by 2014**
    - **Reduce emissions 10% by 2018.**
  - **Covers emissions from in-region power plants > 25 MW**



## RGGI elements

### ■ Allowance allocations:

- First apportioned to RGGI states by fixed amount, each reduced by 10% starting in 2015
- State “budgets” in first year:
  - New York: 64.3 m short tons (53% of total)
  - Connecticut: 10.7 m
  - Maine: 5.9 m
  - New Jersey: 22.9 m
  - Delaware: 7.6 m
  - New Hampshire: 8.6 m
  - Vermont: 1.2 m
- Distributed within state according to state-by-state policy
  - Minimum of 25% allocated “to consumers”
  - Others allocated according to auction, free distribution, etc.





# RGGI elements – compliance strategies

- **Regulated entities meet commitments by:**
  - **Taking steps that result in having sufficient allowances to cover emissions**
    - Fuel switching
    - Technology change
    - Shut down
    - Obtaining sufficient allowances to cover emissions (via auction, purchase, free allocation, banking, offsets)
- **Issues:**
  - Assume that generator bids / bilateral prices will reflect costs including allowances
  - Does NYISO have any reason to be interested in or know how allowance price is being reflected in bids?



# Allowance allocation issues

- **Separation different concepts**
  - “point of regulation” v. “point of receipt of any allowances”
  - No necessity to link the two
- **Methods of allocation**
  - Allocating by the market: auction
  - Allocating by government grant: free distribution
    - “consumer allocation”
    - Allocation to regulated entities
    - Allocation to other entities
- **Issues:**
  - Fairness and cost burden to NY market participants?
  - Deciding whether NYISO has a dog in this fight?



## **“Leakage” of the emissions cap?**

- **CO2 cap impacts of electricity trades between RGGI states and non-RGGI states?**
- **Issues:**
  - **What, if any, are NYISO concerns? Environmental? Fairness?**
  - **Remedies – several mentioned to date?**
    - Tracking (and/or counting) emissions associated with electricity imports (as in RPS, env'l disclosure)?
    - Impute carbon adders for out-of-region bids?
    - Offset leakage with in-region demand reduction?
    - Other?
  - **Which ones affect NYISO operations, markets?**



# Offset issues – what can be used to comply?

## ■ Model rule states:

- Unlimited early redux credits - for projects 12/2005 and 1/1/2009.
- Offsets ok for up to 3% of emissions
- For projects/actions occurring in RGGI region: 1:1
- For projects/actions in the rest of the U.S. states: 1:2
- Eligible Offsets:
  - Landfill gas – avoided emissions
  - Sulfur hexafluoride (SF6) (electric T&D)
  - End-use energy efficiency (avoiding gas, oil)
  - Afforestation – move to re-forestry
  - Farming operations – avoided methane emissions
  - Natural gas T&D – avoided fugitive emissions

## ■ Issues:

- Why not other eligible offsets?
- Availability of offsets?
- Effect on allowance prices?

■ **Effect on compliance outcomes?**



# Price mitigation trigger issues?

- **Offsets Trigger.** If allowance price > \$7.00/ton\* (2005\$):
  - Expand offsets limit & geographic scope of eligible offsets
    - Offsets OK for N. American projects on 1:1 basis
    - Offsets may be used for up to 5% of emissions.
- **Safety Valve.** If allowance price > \$10/ton (2005\$):
  - Extend compliance period to 3 years.
  - If price >\$10 after 2 years, offset cap raised to 20% in the 4th, 5th, and 6th years of extended compliance period.
  - Geographic scope expanded to offsets from int'l trading.
- **Issues on NYISO markets?**
  - Expectations re outcomes in the market?
    - Prices?
    - Dispatch patterns and power flows?
    - Plant closures, etc?



## Internal issues for NYISO: What role(s) in.....

- **Understanding RGGI , addressing any technical implementation issues relating to NYISO's markets?**
- **Analyzing RGGI implications on ...**
  - energy mix? Fuel diversity? Dual-fuel implications?
  - reliability? Long-term, short-term
  - imports / exports?
  - generator bidding behavior?
  - prices?
- **Incorporating RGGI implications into planning (e.g., CRPP assumptions – unit retirements, allowance prices)?**
- **Attempting to play a role in program?**
  - Auction administrator?
  - Tracking carbon emissions of imports, exports?
  - Tracking market power in emissions trading market?



## External issues for NYISO: What role(s) in....

- Taking a position on RGGI design issues?
- If so, what's "given" versus "what's open"?
- Deciding when / where / if to formally comment?
- If so, what process should NYISO take in formulating its position?
- Taking an interest in ensuring common market conditions across states (RTOs) in RGGI market?





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