Allocating to Power Resources: Economic and Environmental Options

RGGI Workshop on Allocations

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Factors to balance in allocating to generators

- Program goals: lower cap, lower total social cost
- Political needs:
  - Eliminating windfall to generators as a class?
  - Softening the blow to even the worst losers?
- Consumer equity vs. generator windfalls
- Equity among affected generators
- Support for efficiency and renewables
- Big spread at issue: 10-20% to Gen up to 80-90%
- How much money is at stake?: 130 million tons x $10/ton = $1.3 Billion/year.

Allocating to generation: on what basis?

- (1) Historic emissions or fuel inputs
  - PRO: nobody badly hurt
  - CON: rewards past pollution; weaker incentives to improve
- (2) Historic power output:
  - PRO: rewards past producer efficiency, better heat rates, clean fossil generation (with updating, rewards future too)
  - CON: creates bigger winners and losers
- (3) Compromise: power output among like fuel users
  - Class averages for each fuel category
  - Coal v Coal – still promotes better heat rates
- Conclusion: Power output-based among fossil generators is better (unless political compromises are necessary). Updating has advantages.

What about nuclear and large-scale hydro?

- PRO: non-emitters deserve equal treatment
- CON: No need to allocate to these resources
  - Why sweeten their enhanced value windfall?
  - No increased compliance costs
  - Heavily subsidized already
  - No desire to promote more
  - These resources raise other environmental concerns
- Conclusion: No need to grant allocations to nuclear and large-scale hydro

Allocating to renewables

- Key ideas:
  - Need to accelerate deployment of renewables (and other clean resources)
  - Allocations can lower the consumer cost penalty
  - Green products need to retire credits
- Option1: Direct allocation to qualified renewable generators
- Option 2: Sale of allowances by public trust – funds for clean resources
- Option 3: Allocate to distribution utilities or LSEs that deliver renewables
- Option 4: Let each state decide

Allocating to renewables

Option	PROs	CONs
Sale by trust	Transparent Flexible	Fiscal “honeypot” Program porkbarrell
Direct allocation to generators	Meshes with RPS and Green Pricing	Transaction costs; Distinguishing nuclear and hydro
Allocation to distribution utilities or LSEs	Portfolio incentive Works with RPS, GP Mitigates costs	Distinguishing nuclear and hydro Will rate reduction follow?
State choice	Local conditions vary	Flexibility may be a problem (e.g., WTE, biomass)

Allocating to efficiency

- **Key ideas**
  - **Efficiency is a system resource, meeting system and customer power needs**
  - **Lowest-cost carbon reduction**
  - **Market barriers to efficiency – requires focus on efficiency *programs*, not electricity *prices***
- **Option 1: Sale by public trust, funds used for efficiency**
- **Option 2: Allocate directly to EE providers on an MWh output basis**
- **Option3: Enroll EE providers in updating program**
  - **-- no allocation to past efficiency, just incremental efficiency**
- **Option 4: State flexibility**

Allocating to efficiency (2)

- EE side issues:
  - (a) Allocate to EE on a carbon-avoided basis, and retire or sell any excess; or (b) distribute the set-aside fully, regardless of negawatt production?
  - (b) Who is an EE provider? Distribution utilities, ESCOs, State SBC Funds ?
  - (c) M& V protocols needed. “A ton has to be a ton.”
- Conclusion: Strong support for EE needed in RGGI model rule, along with state flexibility.

Topic for another day: allocating to imports

- Generation outside the RGGI region, but selling into RGGI, can be treated the same as local generation:
  - Power output-based or Historic emissions
  - Renewables treatment can be the same
- If imports are included, the cap must be increased to account for them on the same basis as in-region resources.

RAP's working conclusions…

- In a system based on allocation to generators, RGGI should look closely at:
- Allocation to emitters based on historic power output, updated over time
- No allocation to nuclear and large hydro
- Set aside those allowances that are not needed to compensate emitting generators
- Allocate the set-aside for public interest resources – renewables/advanced technology and efficiency
- Permit state options: (a) public trust sale of EE/RE credits; (b) direct allocation to EE/RE providers – either producers or distribution utilities and other purchasers.