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Some Considerations Regarding Regulation of Electricity Serving Load in the RGGI Region

Learning Session on Electricity Markets and Electricity Imports
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RGGI is a Success

- A “modest” program—a demo for federal action
 - Fossil electric generation $\geq 25\text{mW}$
 - With slight price on CO_2 it raised $> \$0.9$ billion
- “Proof of Concept;” it demonstrated:
 - Symbiotic role of C&T with other clean energy policies, and environmental and energy regulators
 - Auction
 - Tracking
 - Mkt. monitoring
 - For a time, a robust primary and secondary mkt. for allowances
- Success despite:
 - Geographically challenged: a 9-, 7-, 8-, 10- now 9-state overlay on 3 regional wholesale electric markets
 - Politically-stressed: it’s almost 2012, and no longer 2007 or 2008
 - With slight price on CO_2

FJD --technically feasible for RGGI, but with challenges

➤ RGGI designed with states from a wholesale market outside of RGGI; rest of RGGI States (NY and NE ISO states) “import” from PJM and Canada

➤ Likely Challenges:

Administrative

Will there be rulemakings in each state?

How many companies affected? Today > 100 LSEs in RGGI, other aggregators?

Will all providers be included: IOUs, COOPs, Munis?

Market

Tracking; do you follow:

Electrons (NERC tags)?

Dollars (GATS, GIS, etc.)?

Ability to characterize environmental make-up of system mix is imperfect

Potential for “green washing”

Number of Regulated Load-Serving Entities in RGGI

State	No. of Regulated LSEs
CT	2
DE	1
ME	13
MD	8
MA	4
NH	4
NJ	4
NY	47
RI	3
VT	20

Questions about Applying FJD to RGGI

➤ **Administrative**

Could one company in each state or the ISO manage (for a price) the tracking/accounting required of an FJD program?

➤ **Tracking**

Characterizing environmental make-up of system mix may be imperfect, but is it impossible?

There is a potential for “green washing” energy purchase claims. Aren’t there also ways to help reduce or eliminate this challenge?

Alternative to FJD: the Administrative Approach

➤ Would it be effective to:

- (1) account in the region's budget for all non-RGGI affected fossil-fired mWhs serving load region-wide,
- (2) affix a reasonable emissions attribute to the energy, and
- (3) adjust the overall cap accordingly by retiring allowances?

➤ Would it be effective if there were an *emissions portfolio standard* (EPS) applied to LSEs/Aggregators?

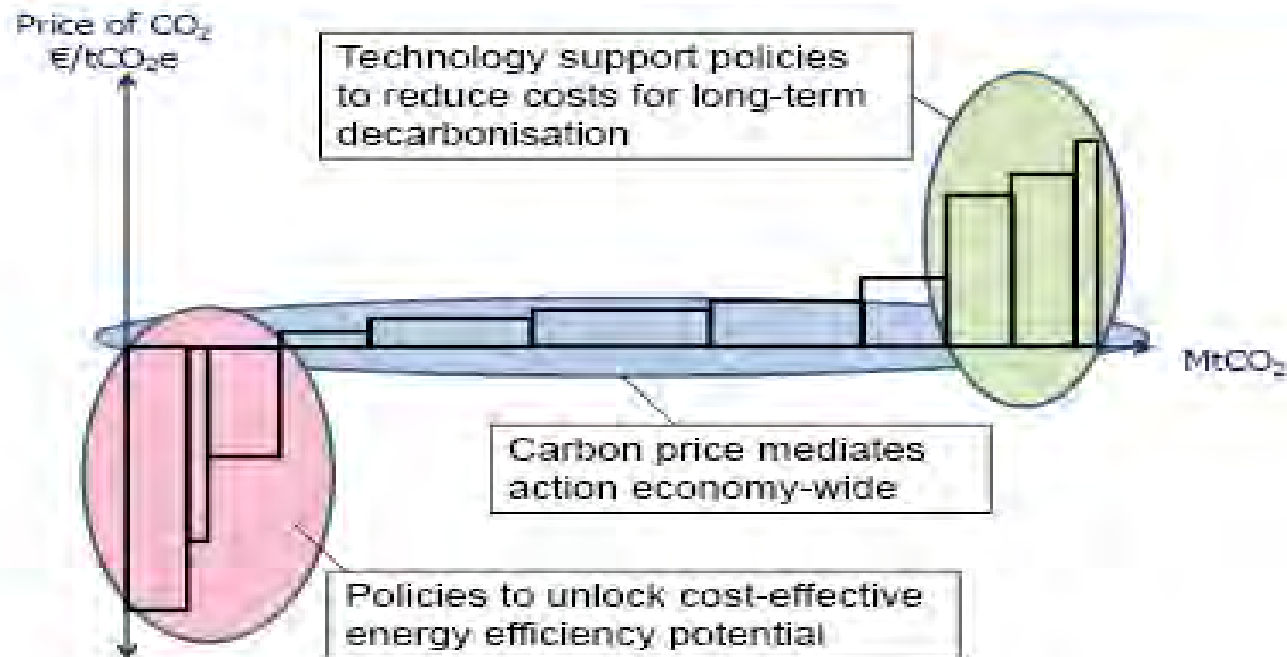
➤ What is a reasonable term for EPS jurisdictional purchases under such a standard?

A First Step: Defining “Leakage”

- RGGI requires in-region fossil-fired electric power generators with a capacity of $\geq 25\text{mW}$ to hold allowances equal to their CO_2 emissions over a three-year period.
- **What about other fossil resources** from both in- and out-of-region that are serving **electricity users** in RGGI?
- Should “leakage” be considered the emissions associated with **all fossil-fueled resources used to serve load in RGGI, other than RGGI-affected units?**
- Is “leakage” the **incremental emissions caused by RGGI from** all fossil-fueled **resources** used to serve load in RGGI other than energy from RGGI-affected units?
- Is “leakage” something else?

Carbon Management—Policy Mix (IEA)

Figure 3.4 The core policy mix: a carbon price, energy efficiency and technology policies



Carbon Management In the Meantime

Supply-side

Imports

- Effects of forthcoming **EPA regulations** on carbon profile in PJM;
- **Natural gas** coming forward in PJM;
- **Alternatives** to Ontario and New Brunswick, i.e., more Quebec power?

In Region <25MW

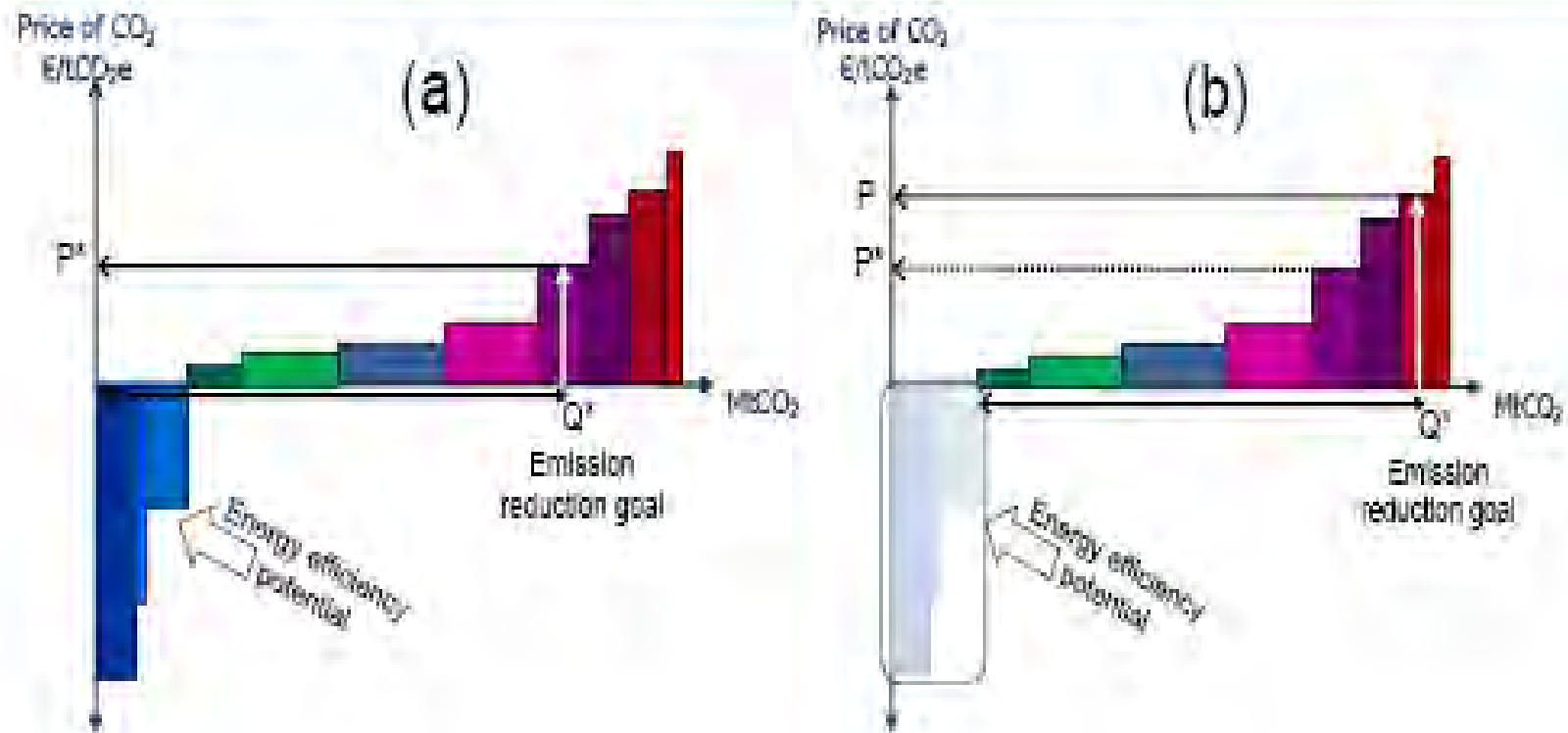
- **<25MW resources** in 2009 >7m mWhs used (**1,690 lbs CO₂/mWh** v. **1191 lbs CO₂/mWh** for PJM).
- Under what **circumstances** are these smaller resources **dispatched**? (See DSM note below)
- **Alternative in-region generation**: MD asking BG&E, Potomac Elec., to build new natural gas gen. 1,500 MW.

Other

- **RPSs** what do they promise
- Do states currently provide all benefits associated with the current purchases of **voluntary renewable resources**? Would expanding this create more demand for them?
- Do any restructured **states** with **provider-of-last-resort auctions** have the **authority** to include environmental attributes in their auction criteria for default service?

Carbon Management –Demand Side (IEA)

Figure 2 Ignoring energy efficiency potential can lead to higher carbon prices

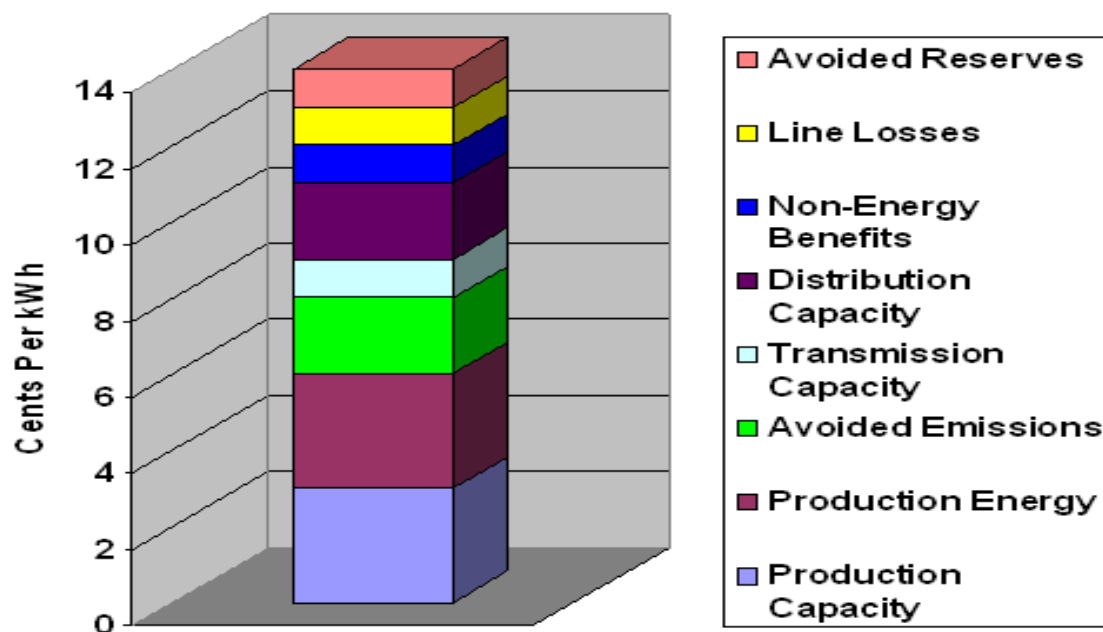


Carbon Management In the Meantime

Demand-side

- Do Commissions value EE properly?
- Are states investing all they can in EE?
- What do potential studies say, and are they up-to-date?
- What are the prospects for EERSs or more aggressive EERSs?
- Is Geo-targeting of EE occurring sufficiently (see emissions of in-region <25MW resources above)

Benefits of EE Investment



“Line Losses and Reserves: Often Undervalued Benefits of Energy Efficiency Investments,” Jim Lazar, RAP Senior Advisor, Presented to: ACEEE Efficiency as a Resource Denver, Colorado

Concluding Thoughts

1. Recognize and celebrate the program's success
2. In taking these next steps, define the challenges associated with non-RGGI-affected generation serving load in the RGGI region
3. With that, fashion the least-disruptive policy responses that harness the least-cost solutions.

Thank you