Applying Cap-and-Trade to the Electricity Sector: Recommendations and Questions from the Market Advisory Committee

MAC report acknowledged significance of electricity-sector GHG emissions, including "embodied" emissions

Important to address potential for leakage and contract-shuffling

Generator-based approach seen as problematic

Potential alternatives:

- Load-based approach
- First-seller approach

Comparison of First-Seller and Load-Based Approaches (Table 5-3 of MAC Report)

Environmental Integrity

Ability to Control Emissions Leakage

Ability to Monitor in-state emissions

Similar under both approaches.

First seller approach may have advantage. Identification of in-state source of emissions more difficult under load-based

approach.

Implications for Consumer Prices

Similar impacts in most cases. However, price impact is muted if allowances are allocated free to LSEs and regulatory agencies do not permit allowance value to be regarded as

costs.

Cost-Effectiveness

Ease of Administration

First seller approach may have advantage via potential for more accurate monitoring. The load-based approach entails additional administrative requirements, such as the need to

track in-state sources by time of day.

Ability to Promote Low-Cost Emissions

Reduction Strategies

Some Committee members feel this is similar under both approaches. Other members claim that load-based approach may have an advantage based on the view that the load-based approach's requirement that LSEs hold allowances will induce greater effort to pursue low-cost strategies.

Ability to Serve as a Model for Other Cap and Trade Programs

First-seller approach may have advantage: it probably would transition more easily to a federal cap and trade program, since a federal program would likely be generator-based.

Questions Related to Contract-Shuffling

Do agencies have the information and authority to curb contract-shuffling?

Long-term Contracts:

Coal-fired electricity:

most goes to munis

fairly clear "line of sight" to identify sources

munis do not have authority to prohibit shuffling

could ARB be granted that authority?

Other electricity:

generally cleaner; no incentive to shuffle contracts

Short-term Contracts:

- Identifying the "marginal generator" in this case is more difficult.
- Would it be sensible in this case to attribute an emissions intensity based on the regional average?