

Wind Powering America Summit

June 9, 2006

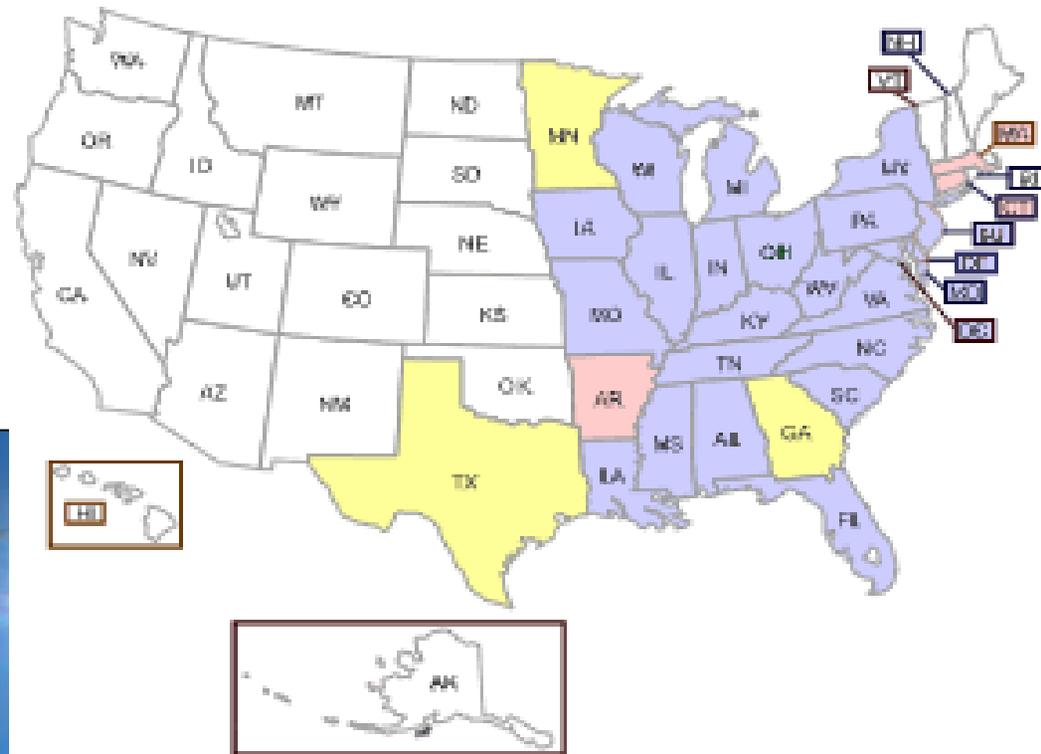
State Update
Clean Air Interstate Rule

Liz Salerno
American Wind Energy Association (AWEA)



Clean Air Interstate Rule (CAIR)

- Issued by the U.S. EPA in March 2005 for 28 eastern U.S. states and the District of Columbia.
- Places a cap on NO_x and SO₂ emissions
- Effective in 2009, implemented in two phases



Program Implementation

- Each regulated state is assigned an emissions cap and may participate in a regional trading program for annual and ozone season NOX and/or annual SO2.
- Can follow the model rule issued by EPA or determine own implementation of certain elements such as allocation (NOx only), timing, etc.
- Must submit rule to EPA by September 2006 or may take the Federal Implementation Plan (FIP) for the first round of allocations and submit state plan by March 2007.



Why include Wind?

- Recognize wind energy for the value it provides under emission regulations
 - Wind displaces other conventional marginal fuel, and associated emissions
 - Under a cap and trade program, emission reduction link is less clear without an allocation of allowances
 - i.e. Acid Rain Program
- Use emission regulations to provide incentive for new development of wind and renewables in-state
- ***Set precedent for future carbon regulation***



How to include Wind

The CAIR can be designed by each participating state to include wind and other renewables:

- Renewable Energy Set-aside
- Output-based Allocation
 - Full output-based allocation
 - Direct output-based allocation to new sources



Renewable Energy Set-aside

How does it work?

- Reserve a portion of allowances for renewable energy, generally 1-5% of overall allowances
- Allocate allowances based on stipulated rate (~1.5lbs NO_x/MWh)



Renewable Energy Set-aside

- Seen under the previous NOx SIP Call program in 7 states
- Several states have issued draft rules under the CAIR including a set-aside for renewables (1-8%)
 - GA, IL, IN, MI, VA



Renewable Energy Set-aside

Issues:

- Determine size of set-aside
 - Should be able to accommodate renewable growth
- Oversubscription
 - Prorate allowances, expand set-aside
- Determining allocation rate
 - Standard rate, actual displacement



Output-based Allocation

EPA model rule allocates allowances based on:

- highest 3-year average from most recent 5 years of **heat input** (mmBtu) for existing sources before January 1, 2001
- Later sources receive allowances based on **modified output** (kWh x 7,900 Btu/kWh or 6,675Btu/kWh)



Output-based Allocation

Allocate *all* allowances based on output

- Provides incentive for efficiency and clean energy sources

Allocate based on output for “new” sources only

- Re-define eligible sources to include renewables, and allocate allowances on modified output similar to conventional new sources.



Model Language

Covered unit means a CAIR NO_x unit, or a renewable energy unit with a nameplate capacity greater than 25 MW that began commercial operation after January 1, 2001

Renewable energy unit means an electric generator or project that began commercial operation after January 1, 2001 and is powered by wind, solar, ocean thermal, wave, geothermal or hydroelectric energy.

(ii) For covered units commencing operation on or after January 1, 2001 and operating each calendar year during a period of 5 or more consecutive calendar years, the average of the 3 highest amounts of the unit's total converted control period heat input over the first such 5 years.

Source: STAPPA/ALAPCO



Other Aspects of Allocation

- What can renewable energy sources do with the allowances?
 - sell back into the market,
 - retire for emission reduction claims
 - bundle with RECs to sell into the voluntary green market (and some RPS markets)
 - Use for credit for non-attainment areas under the SIP Call (SIP program must be designed to allow this)



Other Aspects of Allocation

- Timing of Allocation
 - Updating versus one-time/grandfathering
 - Updating provides behavioral incentive depending upon the allocation method
 - More work for state agencies
 - Lag between allocation
 - New units may not receive allowances immediately



Current Status in the East

Which states are considering renewables?

- CT, MA, MD, MN, MO, NJ, NY, OH, PA, TX, WI
- Many states still developing draft rule
 - Opportunity to provide support and recommendations!



Resources

- STAPPA/ALAPCO, *Alternative NOx Allowance Allocation Language for the Clean Air Interstate Rule*
- Forthcoming: NREL Report on including renewables under a cap and trade with specific recommendations for the CAIR



Contact Info

- Questions?

Liz Salerno

American Wind Energy Association

esalerno@awea.org

202-383-2517

