

Policy Pathways for States under the Clean Power Plan

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Implementation Options For Epa's Proposed Clean Power Plan:

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State Plans

Flexibility included in the Clean Power Plan gives states choices and specific decision points for writing 111(d) plans

What are key objectives?
Threshold decisions?
Policy options?



What are key objectives for a 111(d) plan?

Cost effective

Flexibility for regulated entities

Simplicity and ease of implementation

Limit federal involvement in state energy decisions

Preserve the option to connect to other states

Recognize unique state circumstances

Maintain reliability

Maintain fuel diversity

Achieve the environmental goal

Regulatory certainty (for regulated entities and economic regulators)

Capture reductions from all activities

Consistency with electricity system



Threshold Decisions

- Rate or mass-based approach?
- What entities are to be regulated?
- How much flexibility?
- Trading or no trading?
- Allow power plant owners to use credits or allowances from other states?



Overview of Policy Pathways

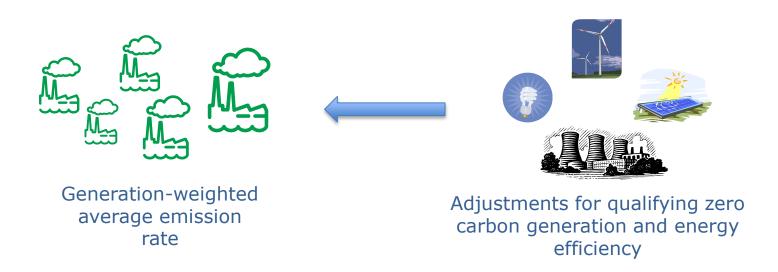
Regulated Entities?	Rate-based	Mass-based
Covered power plants & other entities	State Portfolio/Commitment Approach	State Portfolio/Commitment Approach
Utilities and other covered power plants	Utility Rate Approach	Utility Mass Approach
	Utility Rate Approach w/Optional Trading	Utility Budget Approach with Optional Trading
Plant/Unit Level	Full Rate-based Trading	Full Mass-based Trading



Utility Rate Approach

Utility or other power plant owner meets the rate-based goal on average for its entire fleet, adjusting for qualifying renewable generation and enduse energy efficiency.

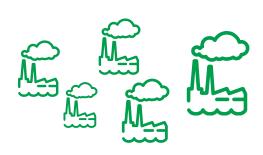
Utility fleet average emission rate = state goal (lbs CO_2/MWh)



Utility Mass Approach

Utility or other power plant owner meets it's mass-based emissions overall for its entire fleet

Utility fleet emissions = portion of state mass goal (tons CO_2)



Add up emissions for all units in the fleet



No adjustments for zero carbon generation and energy efficiency because produces no CO₂



Rate- and Mass-based Flexibility Mechanisms (trading)

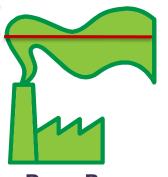
RATE-BASED

Generators must acquire credits if they exceed the emission rate goal

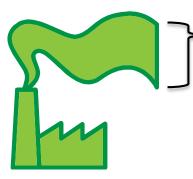
(state goal rate)

Credits:

- extend the concept of averaging emission rates to allow flexibility in where emission reductions occur
- are created by state after verifying generation from units emitting below goal rate and zero carbon RE, EE, nuclear



RATE-BASED Emission rate (lbs CO₂/MWh)



Mass-Based Mass emissions (tons CO₂)

MASS-BASED

Generators must hold allowances for every ton emitted

Allowances:

- operationalize flexibility in where emission reductions occur
- are created by the state before the start of the period to represent an authorization to emit 1 ton of CO₂ each up to the mass goal



Choosing a Policy Pathway for State 111(d) Plans to Meet State Objectives

By Franz Litz, Great Plains Institute and Jennifer Macedonia, Bipartisan Policy Center http://bipartisanpolicy.org/wp-content/uploads/2015/05/Policy-Pathways.pdf

- 1. Coming Requirements for States
- 2. Identifying State Objectives
- 3. Threshold Considerations for Choosing a 111(d) Policy Pathway
 - Rate vs. mass
 - Who will be regulated?
 - How much flexibility for regulated entities?
- 4. Available State Plan Approaches
- 5. Policy Straw Men





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