Clean Power Plan Terminology: CliffsNotes Edition

Heading into a meeting about the Clean Power Plan? If you are unfamiliar with terminology around the plan, this brief review sheet will come in handy. For more thorough explanations, check out excellent resources from E&E, EPA, NRDC, and Synapse, all of which informed this summary.

Emissions performance rates

The heart of the matter. The Clean Power Plan aims to reduce carbon pollution from power plants, and it does so by setting forth two national *emissions performance rates* for carbon dioxide that power plants must meet by 2030: one for coal plants and one for gas plants. These rates are in pounds of carbon pollution per unit (megawatt-hour) of electricity.

Glide path

You didn't wander into an aviation meeting by mistake. This *glide path* is the gradual reduction in carbon pollution that coal and gas plants need to make starting in 2022, hitting *interim* targets along the way to achieving their *final* performance rate by 2030.

Rate-based approach

There's a lot of flexibility for states in the Clean Power Plan, including meeting limits in terms of a *rate* of carbon pollution or a *quantity* of carbon pollution. One *rate-based* option is for a state to enforce the two emissions performance rates for coal and gas plants (*dual-rate approach*). Another option is to instead meet a single state-specific emission rate limit that EPA set for each state (*blended rate approach*). To meet these limits, power companies invest in emissions reductions directly or by acquiring *emission rate credits*.

Emission rate credits (ERCs)

Improving energy efficiency or adding clean energy can displace generation from fossil fuel plants, reducing the *quantity* of carbon pollution but not affecting the *rate* of pollution from plants covered by the Clean Power Plan. In a rate-based approach, states issue one *emission rate credit* (ERC) for each pollution-free megawatt-hour of electricity from energy efficiency or clean energy. Power plant owners can submit these credits to comply with the rate limits. Compliance is determined by their actual pollution rate averaged with the megawatt hours of clean energy (ERCs) they submit. They can create ERCs by implementing clean energy and energy efficiency themselves, or they can buy credits created by other projects.

Mass-based approach

Ready to forget about ERCs? If a state chooses a *mass-based approach* instead of rate-based, it will be meeting a state-specific limit on the quantity (tons) of carbon pollution from coal and gas plants. In this case, energy efficiency or renewables that displace coal or gas generation in turn reduce the amount of carbon pollution – so these contributions are accounted for without ERCs. In a mass-based approach, compliance is tracked in tons of carbon, or *allowances*.

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Allowances

An allowance is essentially a "permit" to release a ton of carbon pollution from a power plant under a mass-based approach. States that want to enable mass-based trading distribute one *allowance* for every ton of carbon pollution allowed under state-specific limits annually. Coal and gas plant owners need to acquire enough allowances for *all* of their pollution. How allowances are distributed is an important question, and there's flexibility. For example, allowances could be given to power companies for free – or allowances could be sold in an auction, creating funds that could be used to benefit impacted communities, workers, consumers, energy efficiency, clean energy or other priorities.

Set-asides

One option a state using a mass-based approach can consider when it comes to distributing allowances is to *set aside* a certain number of allowances for a specific goal. For example, some allowances could be given directly to energy efficiency providers and clean energy developers to sell in order to raise funds for energy efficiency and clean energy projects.

Leakage

It doesn't sound good, does it? Consider this scenario: generation at an existing coal plant is reduced to meet mass-based carbon pollution limits, but its generation is replaced by a *new* gas plant whose carbon pollution isn't covered under Clean Power Plan limits. That's *emissions leakage* – situations where Clean Power Plan carbon reduction goals might be undermined. That's why states with mass-based plans must clearly address any emissions leakage potential. One option is for the state to include both existing and new power plants together in a mass-based compliance plan.

Clean Energy Incentive Program (CEIP)

The Clean Power Plan allows renewables and energy efficiency projects to earn ERCs or allowances for carbon pollution they offset in 2022 and beyond. The optional *Clean Energy Incentive Program (CEIP)* provides further clean energy encouragement by enabling some energy efficiency, solar and wind projects to also earn ERCs or allowances for carbon reductions in 2020-2021. For energy efficiency projects to qualify, they need to serve low-income communities – and both efficiency and renewables projects must begin after a final state compliance plan is submitted. There is a special bonus: some of the credits/allowances for CEIP-eligible projects will come from a pool set aside by EPA that matches those from the state, and low-income energy efficiency gets double credit. A state has to *opt into* the CEIP.

Evaluation, Measurement & Verification (EM&V)

EM&V is the way that projects like energy efficiency or clean energy prove the zero-emissions energy they're producing that qualifies for ERCs or CEIP credits/allowances. It includes both an up-front plan for measurement and independent verification, and then a measurement and verification report after the project has been operating for a year.

Trading ready

If a state writes a *trading ready* plan, power plant owners in the state can obtain ERCs or allowances from another trading ready state for compliance (and vice versa), which may lower costs. A state plan is trading ready if it meets certain basic requirements, such as an EPA-approved tracking system.

Federal Plan

EPA reviews state plans for approval. If a plan is inadequate or if a state fails to adopt a plan, then EPA must implement a *federal plan* for the state.

State clean energy policies (RPS & EERS)

State-level policies on clean energy and energy efficiency are also important as part of Clean Power Plan discussions, as they spur pollution-free energy that supports low-cost compliance with the carbon standards as well as economic development. These include policies like *Renewable Portfolio Standards (RPS)* that require clean energy be used for a certain portion of utilities' generation – and *Energy Efficiency Resource Standards (EERS)* that require utilities to deploy energy efficiency programs for customers, saving energy and money.