



Update on CPP, Permitting & Modeling- Southern Section AWMA

Katy R. Lusky

EPA Region 4

September 21, 2016

Clean Power Plan Update



Supreme Court Stays the Clean Power Plan

- ▶ February 9, 2016 – The Supreme Court stayed implementation and enforcement of the Clean Power Plan pending judicial review
 - The Court’s decision was not on the merits of the rule
- ▶ EPA firmly believes the Clean Power Plan will be upheld when the merits are considered because the rule rests on strong scientific and legal foundations
- ▶ For the states that choose to continue to work to cut carbon pollution from power plants and seek the agency’s guidance and assistance, EPA will continue to provide tools and support
- ▶ EPA will provide additional information as it is available

The remainder of this presentation describes the various components of the CPP for existing sources as they were on February 9, 2016, and is presented only for informational purposes – implementation and enforcement of the CPP for existing sources is on hold pending judicial review

Key Points

- Implementation and enforcement are on hold
- State submittals not required on September 6, 2016
- EPA will continue to work with states that want to work with us on a voluntary basis

Status Summary

- ▶ On August 3, 2015 EPA announced three actions that will significantly reduce carbon pollution from the power sector, the largest source of carbon pollution in the US
 - **Carbon Pollution Standards** – new, modified and reconstructed sources ←**IN EFFECT; NOT STAYED**
 - *80 FR 64509; October 23, 2015*
 - **Clean Power Plan (CPP)** – existing sources ←**STAYED**
 - *80 FR 64661; October 23, 2015*
 - **Federal Plan proposal and model rules** ←**Proposed, not finalized**
 - *80 FR 64965; October 23, 2015*
- ▶ When the stay is lifted EPA's actions will
 - Achieve significant pollution reductions
 - Deliver an approach that gives states and utilities plenty of time to preserve ample, reliable and affordable power

www.epa.gov/cleanpowerplan

Presented for informational purposes only; the CPP for existing sources is stayed pending judicial review

Opportunities for Early Investments

- ▶ In the final Clean Power Plan, EPA provided the Clean Energy Incentive Program (CEIP) to incentivize early investments that generate wind and solar power or reduce end-use energy demand during 2020 and 2021
- ▶ The CEIP is an optional, “matching fund” program states may choose to use to incentivize early investments in wind or solar power, as well as demand-side energy efficiency measures that are implemented in low-income communities
- ▶ EPA will provide matching allowances or Emission Rate Credits (ERCs) to states that participate in the CEIP, up to an amount equal to the equivalent of 300 million short tons of CO₂ emissions. The match is larger for low-income EE projects, targeted at removing historic barriers to deployment of these measures. Also, states with more challenging emissions reduction targets will have access to a proportionately larger share of the match
- ▶ EPA engaged with stakeholders in the fall of 2015 to discuss the CEIP and gather feedback on specific elements of the program

What is the Clean Energy Incentive Program (CEIP)?

- ▶ The CEIP is an **optional** early-action program, designed to provide multiple benefits, including:
 - Helping states, tribes, and affected sources meet their emission goals under the Clean Power Plan;
 - Providing incentives for investment in demand-side energy efficiency measures and solar power generation in low-income communities; and
 - Encouraging early investment in renewable energy generation from wind, solar, geothermal, and hydropower.
- ▶ Key parts of the program were finalized on October 23, 2015 in the Clean Power Plan, in which the Environmental Protection Agency (EPA) also committed to providing design details of the CEIP in a later action.
- ▶ On June 16, 2016, the EPA provided these CEIP design details in a proposed rule.

How Does the Stay Impact the CEIP Proposal?

- ▶ On February 9, 2016, the Supreme Court stayed the Clean Power Plan pending judicial review
- ▶ No one has to comply with the Clean Power Plan while the stay is in effect
- ▶ EPA is moving forward with developing the CEIP in a manner consistent with the stay
 - Many states and stakeholders have urged EPA to move forward to provide support to their voluntary efforts
 - The September 2016 submittal deadline is no longer effective
 - All Clean Power Plan timing elements, including the CEIP, are expected to be worked out at the end of the litigation

What Opportunities Does the Clean Power Plan Provide for Energy Efficiency and Renewable Energy?

- ▶ EPA is committed to helping communities benefit from eligible energy efficiency (EE) and renewable energy (RE) projects
- ▶ The EPA expects EE and RE to be part of key compliance strategies and includes incentives to stimulate early investment in these technologies
- ▶ EE and RE will continue to be proven, widely-used strategies to substantially lower CO₂ emissions from the power sector in a cost-effective way

How Can Communities Benefit from the CEIP?

- ▶ All communities can benefit from renewable energy projects incentivized by the CEIP
- ▶ In addition, low-income communities can also benefit from demand-side-energy efficiency and solar projects
- ▶ Benefits of these activities include:
 - Potential for local jobs
 - Potential for reduced energy bills
 - Less air pollution
- ▶ The CEIP promotes early action, so that states and tribes can realize these benefits prior to the first performance period under the final Clean Power Plan

How Does the CEIP Work?

- ▶ A state that chooses and is approved to participate in the CEIP may make “early action” awards -- either allowances or emission rate credits (ERCs) -- to eligible CEIP RE and low-income community projects
- ▶ After a state makes such an early action award, the project may then receive a “matching” award from the EPA, which the state may distribute on the EPA’s behalf
- ▶ **Matching awards** are made from an EPA matching pool that is limited to a number of allowances or ERCs equal to 300 million short tons of CO₂
 - A portion of the matching pool will be reserved for renewable energy projects, and a portion will be reserved for low-income community projects
 - **Renewable energy projects will receive a 1:1 award;**
Low-income community projects will receive a 2:1 award

What Does the CEIP Design Details Proposal Cover?

- ▶ This proposal is an opportunity for the public to provide further feedback on several design elements of the CEIP
- ▶ Significant pre-proposal stakeholder input informed this proposal
 - Dozens of stakeholder meetings, trainings and Q&A sessions on the CEIP, four listening sessions attended by more than 750 participants, and a non-regulatory docket that received more than 5,000 public comments
- ▶ Key proposed provisions include:
 - Eligibility requirements for CEIP projects
 - Requirements for definition of “low-income community”
 - Apportionment of the matching pool of 300 million short tons of CO₂ emissions among the states and tribes with affected power plants

What Are the Proposed Eligibility Requirements?

- ▶ EPA is proposing a limited expansion of the types of projects that may be eligible for the CEIP
 - For low-income community projects, EPA is proposing to include solar projects that provide direct electricity bill benefits to low-income community ratepayers, in addition to demand-side EE projects, as eligible for the 2:1 award from the low-income community reserve
 - For renewable energy projects, EPA is proposing to include geothermal and hydropower in addition to wind and solar, as eligible for the 1:1 award from the renewable energy reserve

What Are the Proposed Eligibility Requirements for Renewable Energy Projects?

- ▶ **Renewable energy** projects in all communities would be eligible based on when they **commence commercial operation**
 - In the proposal, this is defined as when a project begins selling “useable” electricity or, in the case of some low-income community solar projects, when a project begins providing direct electricity bill benefits to low-income community ratepayers
 - The term “commence commercial operation” would replace the term “commence construction” included in the final Clean Power Plan
 - We are also proposing to revise the eligibility date for commence commercial operation for RE to on or after January 1, 2020

What Are the Proposed Eligibility Requirements for Energy Efficiency Projects?

- ▶ **Demand-side energy efficiency** projects in low-income communities would be eligible based on when they **commence operation**, consistent with the final Clean Power Plan
 - In the proposal, “commence operation” is defined as the date on which an eligible CEIP low-income community project is delivering quantifiable and verifiable electricity savings
 - We are proposing that such projects would be eligible if they commence operation on or after September 6, 2018
 - We are proposing to eliminate the date of state plan submittal as the project eligibility date

What Are the Proposed Requirements for Defining ‘Low-Income Community’ ?

- ▶ As proposed, **states and tribes may use one or more existing definitions for “low-income community”**
 - This includes local, state or federal definitions from programs that provide benefits to low-income households and populations
 - Any definition used must have been established prior to the publication of the final Clean Power Plan on October 23, 2015
 - Selected definition(s) may be based on a geographic area that includes low-income households, and/or may be based on a household-level income determination
 - States and tribes would then consistently apply their selected definition(s) to determine eligibility of energy efficiency and solar projects that are implemented to serve low-income communities

How is the Matching Pool Defined?

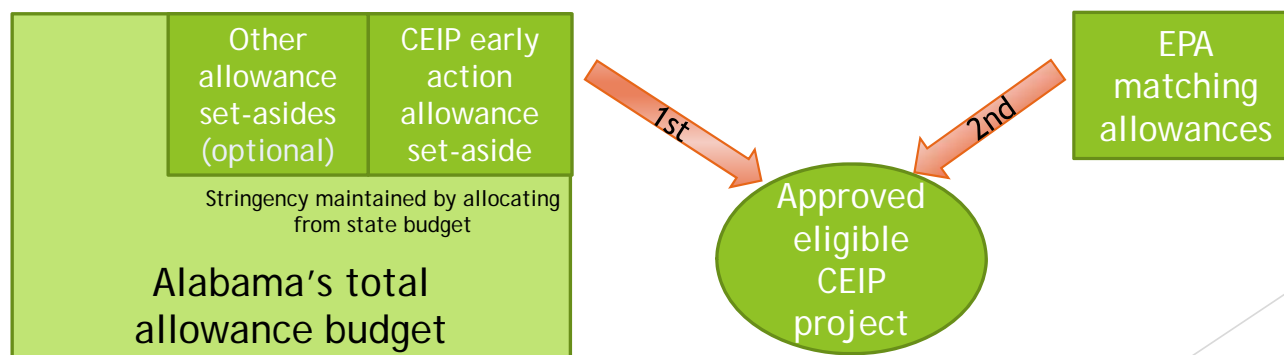
- ▶ As finalized in the Clean Power Plan, each state and tribe with affected sources is to be apportioned a proportional share of the 300 million short ton matching pool based on its required emission reductions
- ▶ EPA is proposing that the matching pool be split evenly between two reserves
 - 50 percent of the matching pool for low-income community projects
 - 50 percent of the matching pool for renewable energy projects
- ▶ EPA is proposing to define the matching pool, in terms of allowances and ERCs, as follows:
 - Mass-based programs: 300 million allowances
 - Rate-based programs: 375 million ERCs
- ▶ Tables listing each state and tribe's pro-rata share can be found at:
<https://www.epa.gov/cleanpowerplan/clean-energy-incentive-program>
 - These tables reflect the maximum amount of CEIP matching allowances or ERCs that may be awarded by a given state or tribe
- ▶ The EPA is proposing that no additional reapportionment will occur in the case there are any unused matching allowances or ERCs. Unused matching allowances will be retired on January 1, 2023

How Does the Proposed CEIP Match Work? *Mass-Based Example*

- ▶ In the proposed CEIP design details preamble, Table 1 proposes that Alabama’s **share of the matching pool** would be 9.37 million allowances
- ▶ In a mass-based approach, Alabama can establish a CEIP early action set-aside up to a maximum of 9.37 million allowances
- ▶ States must allocate early action allowances to eligible CEIP project providers first; these awards are then matched by the EPA

TABLE 1—Proposed State Shares of Matching Pool (Allowances)

State	RE Reserve	Low-Income Community Reserve	Total Share
Alabama	4,683,458	4,683,458	9,366,916

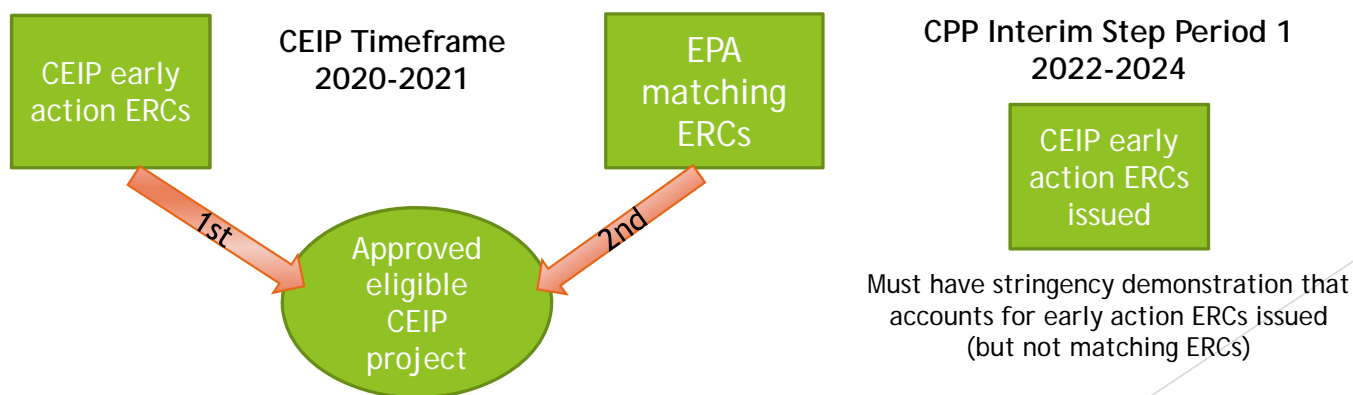


How Does the Proposed CEIP Match Work? *Rate-Based Example*

- ▶ In the proposed CEIP design details preamble, Table 2 proposes Alabama’s **state share of the matching pool** would be 11.7 million ERCs
- ▶ In a rate-based approach, Alabama can issue early action ERCs up to a maximum of 11.7 million
- ▶ States must issue early action ERCs to eligible CEIP project providers first; these awards are then matched by the EPA

TABLE 2—Proposed State Shares of Matching Pool (ERCs)

State	RE Reserve	Low-Income Community Reserve	Total Share
Alabama	5,854,323	5,854,323	11,708.646



How Do I Comment on the CEIP?

- ▶ The proposal was published in the Federal Register on June 30, 2016
- ▶ EPA will accept comments on the proposal through **November 1, 2016**
- ▶ Comments, identified by Docket ID No. EPA-HQ-OAR-2016-0033, may be submitted by one of the following methods:
 - ▶ **www.regulations.gov:** follow the on-line instructions for submitting comments
 - ▶ **Email:** Comments may be sent by electronic mail (email) to a-and-r-Docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2016-0033 in the subject line of the message
 - ▶ **Mail:** Environmental Protection Agency, EPA Docket Center (EPA/DC), Mail Code 28221T, Attention Docket ID No. EPA-HQ-OAR-2016-0033, 1200 Pennsylvania Avenue, NW, Washington, DC 20460
 - ▶ **Fax:** Fax your comments to: (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2016-0033
 - ▶ **Hand/Courier Delivery:** EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC 20004, Attention Docket ID No. EPA-HQ-OAR-2016-0033. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information

Whom Do I Contact with Questions?

We welcome your feedback and questions!

- Tina Ndoh, CEIP Project Lead, Office of Air Quality Planning and Standards, ndoh.tina@epa.gov, 919-541-2750
- Cate Hight, Office of Atmospheric Programs, hight.cate@epa.gov, 202-343-9230
- Laura McKelvey, Group Leader for Community and Tribal Programs Group, Office of Air Quality Planning and Standards, mckelvey.laura@epa.gov, 919-541-5497

Where Can I Learn More About the CEIP?

- ▶ For more information on the Clean Energy Incentive Program, see the CEIP page: <http://www2.epa.gov/cleanpowerplan/clean-energy-incentive-program>
- ▶ For more information and to access a copy of the Clean Power Plan, visit: <http://www2.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants>
- ▶ For community-specific information and engagement opportunities, see the Clean Power Plan Community Page: <http://www2.epa.gov/cleanpowerplan/clean-power-plan-community-page>
- ▶ Informational resources for state and local governments and other organizations implementing EE/RE programs: <https://www.epa.gov/statelocalclimate/bringing-benefits-energy-efficiency-and-renewable-energy-low-income-communities>
- ▶ Federal initiative to increase solar access for all Americans: <https://www.whitehouse.gov/the-press-office/2015/07/07/fact-sheet-administration-announces-new-initiative-increase-solar-access>
- ▶ EPA provides webinars and training on CPP related topics at the air pollution control learning website. See: <http://www.apti-learn.net/lms/cpp/plan/>

Air Permitting Update



General Updates

- ▶ One EPA Web Page – <http://www2.epa.gov/caa-permitting>
 - Make changes to any links that reference old site as well as in public notices
 - Let us know if you can't find things
- ▶ EJ 2020
 - Public comment period ended fall 2015
 - Final document with response to comments is in development
- ▶ GHG SER Proposal
 - Changes regulatory definitions and proposes 75,000 TPY as the GHG Significant Emission Rate (SER)
 - Proposal signed on August 26, 2016, waiting for FR publication

E-Notice Rule for NSR, Title V and OCS Permitting

- ▶ The purpose of the rulemaking is to remove the mandatory newspaper publication requirement for air permits and provide electronic notice as an effective and adequate standard for public notice
 - States have the discretion to continue using newspaper notice
- ▶ Consistent with Clean Air Act Advisory Committee Task Force Recommendations
- ▶ Comment Period ended February 29, 2016
- ▶ Most comments were supportive
 - one comment from a newspaper organization opposed the rule
- ▶ Final rule projected in fall 2016

Title V Petition Rulemaking

- ▶ Proposal identifies mandatory guidelines on the substance and format of title V petitions submitted to the Agency.
- ▶ Requirements for the electronic submittal of title V petitions by the specific method identified in the rule.
- ▶ Sets forth a more detailed process for the EPA review of title V petitions, next steps following the EPA action on a petition, and mandated minimum contents of a petition.
- ▶ Proposal may provide a greater level of engagement with state and local permitting authorities concerning the EPA's review of a petition regarding state and local title V permits.
- ▶ FR publication August 24, 2016 (81 FR 57822).
- ▶ Comment period **closes October 24, 2016.**

Staffing

Heather Ceron – Air Permitting Section Chief

- ▶ Yolanda Adams – General Permit Expert/Mississippi State Contact
- ▶ Kelly Fortin – OCS and general Policy Expert
- ▶ Natasha Hazziez – Florida State/Local Contact and EJ assistance
- ▶ Art Hofmeister – Kentucky State/Local Contact and Title V Petition Expert
- ▶ Terry Johnson – North Carolina State/Local Contact and CPP Expert
- ▶ Eva Land – Tennessee State/Local Contact, OCS/LNG and Tribal Backup
- ▶ Ana Oquendo – Tribal Coordinator and Florida backup
- ▶ Andrew Porter – Georgia State Contact
- ▶ James Purvis – South Carolina State Contact and PAL/CAM Expert
- ▶ Lori Shepherd – NSR Expert
- ▶ Randy Terry – Alabama State/Local Contact and EJ Expert
- ▶ Garrett Schroeder – Tennessee State and Local Contact Backup

Air Quality Modeling Update

The right side of the slide features a decorative graphic composed of several overlapping, semi-transparent green shapes. These shapes are primarily triangles and quadrilaterals, creating a layered, abstract effect. The colors range from a light, pale green to a darker, forest green. The shapes are positioned on the right side of the slide, partially overlapping the white background.

Proposed Revisions to Appendix W Guidelines

- ▶ EPA's OAQPS-AQAD-AQMG and Model Clearinghouse are responsible for the development and proposal of all preferred models or techniques per Appendix W, Section 3.1.
- ▶ Major Proposed changes include:
 - Codifying the long-standing process of the Regional Offices consulting and coordinating with the Model Clearinghouse on all approvals of alternative models and techniques
 - For long-range air quality assessments, the EPA is proposing to remove CALPUFF as a preferred model and recommending its use as a screening technique along with other Lagrangian models for addressing PSD increment beyond 50 km from a new or modifying source.
 - Incorporate current modeling techniques to address the secondary chemical formation of fine particle and ozone pollution from direct, single source emissions of pollutants that form them such as sulfur dioxide, oxides of nitrogen, volatile organic compounds
 - To provide more flexibility and improve the meteorological inputs used for regulatory modeling
- ▶ Proposed on July 14, 2015
- ▶ Public Hearing held and Comment Period closed October 27, 2015
- ▶ Final expected Fall 2016

“Beta Option” Clarification Memorandum

- ▶ EPA released a formal clarification memorandum specific to “beta options” on December 10, 2015.
- ▶ If a beta option within an EPA preferred model is used in a regulatory application, then the status of the preferred model is changed to that of an **alternative model** and is subject to the requirements of Appendix W, Section 3.2.2.
- ▶ Delegated approval of any alternative model to the Regional Offices that includes the application of a beta option must be done in consultation and concurrence with the Model Clearinghouse, which allows for national consistency in approvals and complete transparency with the stakeholder community.

PM_{2.5} and Ozone Significant Impact Level (SIL) Guidance

- ▶ Recommends PM_{2.5} and Ozone SILs and provides a stronger technical basis for SILs
- ▶ Draft ozone and PM_{2.5} SIL guidance posted online on August 1, 2016, updated on August 8, 2016
- ▶ Guidance and Supporting documents (including the technical basis document) are available for informal review and comment through **September 30, 2016**
- ▶ Comments can be made at the following website
<https://www.epa.gov/nsr/forms/significant-impact-levels-ozone-and-fine-particles-prevention-significant-deterioration>
- ▶ Please contact Jennifer Shaltanis at 919-541-2580 or shaltanis.jennifer@epa.gov

Model Emission Rates for Precursors (MERPs) guidance

- ▶ SILs guidance will be complemented by the development of Model Emission Rates for Precursors (MERPs) guidance
 - (NO_x and VOC for ozone) and (NO_x and SO₂ for PM_{2.5})
 - Used as a tier 1 “screening tool” to determine if modeling is required
 - Intertwined with SILs (*e.g.*, < MERP* would be < SIL)
- ▶ EPA has switched to near-term guidance for quicker response (in place with final Appendix W)
- ▶ Note: There will not be a national number for MERPs
- ▶ MERP guidance expected shortly after SIL guidance

SO₂ Key Dates

- ▶ **July 1, 2016:** States specify (for each applicable DRR source) whether they will monitor air quality, model air quality, or establish an enforceable limit
 - Air agency also accordingly submits a revised monitoring plan, modeling protocols, or descriptions of planned limits on source emissions to less than 2,000 TPY
- ▶ **July 2, 2016:** Consent Decree deadline for EPA to make final Round 2 designations
- ▶ **January 2017**
 - New monitoring sites must be operational by January 1, 2017
 - Modeling analyses must be submitted to EPA by January 13, 2017
 - Documentation of federally enforceable emission limits and compliance must be submitted to EPA by January 13, 2017
- ▶ **Early 2020:** Monitoring sites will have 3 years of quality-assured data which must be submitted to EPA

SO₂ Designations Modeling

Modeling for SO₂ Data Requirements Rule (DRR) Sources – Rounds 3 & 4

- ▶ To date, EPA R4 has reviewed and provided comments on Modeling Protocols for 50 sources that will be characterized by modeling for the Round 3 designations (Protocols required to be provided to EPA by July 1, 2016).
- ▶ To date, EPA R4 has received modeling to support siting ambient SO₂ monitors for 8 areas choosing to use ambient monitoring to characterize impacts by 2020 (Round 4 of designations).
 - 5 areas in North Carolina
 - 1 area in Kentucky (2 separate DRR sources located together)
 - 1 area in Georgia
 - 1 area in Alabama

Questions?

Katy R. Lusky

404-562-9130

lusky.kathleen@epa.gov