

CEIP Design Details Proposal

Steve Burr
Principal Environmental Specialist
AQD, Air Quality Improvement Planning Section
August 17, 2016



Overview



- EPA's Justification for Proposal
- Review of Clean Power Plan Basics
 - Standards
 - Compliance Period
- CEIP in Final Rule
- Design Details Proposal Issues for Comment

EPA Justification



- Supreme Court stay prohibits agency from enforcing CPP
- Not from adopting related rules or providing assistance to states that are pursuing implementation despite the stay
- Deadline for comments: 9/2/2016

Standards



- Rate-Based
 - Separate, nationally uniform, "performance rates" for fossil fuel steam (FFS) and NGCC

National Performance Rates (lbs CO ₂ /MWh)			
Subcategory	Interim	Final	
Fossil Steam	1,534	1,305	
NGCC	832	771	

 State "rate-based CO₂ goals" based on application of performance rates to each state's 2012 generation mix

Arizona Rate-Based Goals (lbs CO ₂ /MWh)		
Interim	Final	
1,173	1,031	

Standards



- Mass-Based
 - For existing EGUs only

Arizona Mass-Based Goals (short tons CO ₂)		
Interim	Final	
33,061,997	30,170,150	

For existing EGUs with "new source complement"

Arizona Mass-Based Goals with New Source Complement (short tons CO ₂)		
Interim	Final	
34,486,994	32,380,196	

 State plan must demonstrate achievement of one of these goals

Compliance Period



- 2022+ (2020 in proposal)
- Interim Compliance Period = 2022-2029
- Final Compliance Period = 2030+

CEIP in Final CPP



- Goal: Provide incentive for early implementation (i.e. 2020-2021) of RE and EE by awarding ERCs or allowances to eligible projects
- Eligible Projects
 - Located in or benefit a state implementing CEIP
 - Commence construction (RE) or operation (EE) after submission of final plan or 9/6/2018 if none submitted
 - During 2020-2021, either (a) generate metered MWh from any wind or solar resource or (b) result in quantified and verified electricity savings through demand side EE in low-income communities

CEIP in Final CPP



Credits

- Allocated from state budget for 2022-2029 interim compliance period; EPA provides matching credits as the incentive for participation
- RE Projects: For every 2 MWh generated, project receives 1 ERC from state and 1 matching ERC from EPA
- EE Projects: For every 2 MWh generated, project receives 2 ERCs from state and 2 matching ERCs from EPA
- For mass-based program, project receives ERC equivalent in allowances; in TSD EPA applies emission factor of 0.8 short tons CO₂ per MWh FF generation
- EPA matching awards are extra; state's must not reduce stringency of program



- Size of Pool in ERCs
 - 300,000,000 allowances (tons CO₂)
 - Factor of 0.8 tons CO₂ per MWh
 - 375,000,000 ERCs
 - TWG: no objection
- Award Ratio for Mass-Based States
 - Have to convert MWh of RE generation or EE savings to ton CO₂
 - Again 0.8 tons CO₂ per MWh
 - E.g. 1,000,000 MWh of EE savings in 2020-2021 = 800,000 allowances
 - TWG: no objection



- Expansion of Eligible Projects
 - RE
 - Final CPP: Solar and wind only
 - Proposal: Expand to include hydropower and geothermal
 - TWG: no objection
 - Low Income Community Projects (LICP)
 - Final CPP: EE only
 - Proposal: Expand to include solar projects that provide "direct bill benefits" to low income communities
 - TWG: No objection to expansion; concern about requiring bill benefits



Timing of Eligibility

- Final CPP
 - Test
 - Commence construction for RE
 - Commence operation for EE (LICP)
 - Date
 - After final plan submittal
 - ❖ After 9/6/2018 if none (federal plan)
- Proposal
 - Change test for RE to commence commercial operation on or after 1/1/2020
 - Change date for EE to 9/6/2018
- TWG: oppose



Division of Pool Between Eligible RE and LICP

- Proposal
 - Divide evenly (i.e. 150,000,000 for RE; 150,000,000 for LICP)
 - Do not allow redistribution if one or other is undersubscribed

- TWG

- More flexibility, but not unlimited
- Include protections to assure LICP not disadvantaged
- Should not be limited to solar



- Division of Pool Among States
 - Final CPP: based on relative stringency of goal
 - Proposal: retain
 - TWG: Comment in favor
- Reapportionment among states
 - Possibilities
 - States that do not adopt CEIP
 - Undersubscribed states
 - Proposal: none allowed
 - TWG: Reapportionment should be possible under some circumstances



Maintaining Stringency

- I.e. state CEIP awards do not increase total awards otherwise available under program (EPA matching awards do)
- Problem for ERCs: no preexisting pool or budget to allocate from, as in case of allowances; ERCs must be created
- EPA solution: Deduct from future awards to ERC generators
- TWG: oppose