Arkansas Department of Environmental Quality Calls

EPA's Proposed Clean Power Plan Federal Plan and Model Rules

December 16, 2015, 10:00 a.m. – 12:00 p.m.

Topic: Rate-based Implementation Approach

This call will be organized around the following subtopics:

- ERC Crediting
- EM&V Requirements
- Use of Subcategorized Rate Approach
- ERC Issuance
- CEIP and Early Action ERCs
- Independent Verifiers
- Emission Standards Compliance
- ERC Banking and Borrowing
- Monitoring and Reporting

Items for comment from EPA's proposal that pertain to these subtopics are listed in the table below. On this call, stakeholders will have the opportunity to discuss the items for comment and present information pertaining to these items for consideration.

Item for comment	Prepublication page	80 FR xxxxx	Session #	Subtopic
The proposed rate-based approach, in accordance with the final EGs, restricts ERC issuance for any emission reduction measures located in a mass-based state, except for RE.	65	64978	Rate-based Implementation Approach	ERC Crediting
RE measures located in a state with a mass-based state plan can only be approved for ERC issuance for use by a state under a rate-based federal plan if it can be demonstrated that load-serving entities in the rate-based state have contracted for the delivery of the RE generation that occurs in a mass-based state to meet load in a rate-based state. As part of this federal plan, EPA is proposing that this can be demonstrated through the provision of a power delivery contract or power purchase agreement in which an entity in the rate-based state contracts for the supply of the MWhs in question and providing documentation that the electricity was treated as comparable to a generation resource used to serve regional load that included	65	64978	Rate-based Implementation Approach	ERC Crediting

the rate-based state.				
It should also be noted that EPA is proposing that under the proposed mass-based approach, if RE located in a mass-based state receives mass-based set-aside allowances for any generation, that generation is not eligible to be issued ERCs in a rate-based state.	66	64978	Rate-based Implementation Approach	ERC Crediting
This section describes the proposed rate-based federal plan and model trading rule and how each would be designed and operated, consistent with the emission guidelines (EGs). For the federal plan, the EPA is proposing to limit the issuance of emission reduction credits (ERCs) to designated categories of affected EGUs and to RE resources and nuclear generation (from new capacity and incremental capacity uprates) that are measured by a revenue quality meter, rather than the full suite of options discussed in the EGs. The EPA requests comment on whether to limit the scope of the federal plan in this manner, and if not, what other sources of low- or zero-emitting electricity in federal plan states should also be eligible to generate ERCs for compliance purposes.	124-125	64990	Rate-based Implementation Approach	ERC Crediting
Under this proposed federal plan, ERCs will be issued by the EPA to three categories of entities: (1) affected EGUs that perform at a rate below the applicable emission rate standard; (2) affected NGCC units for all generation (represents shifting generation from SGUs to NGCC units, as anticipated under Building Block 2); (3) new nuclear units and capacity uprates at existing nuclear units, and (4) RE providers that develop metered projects and programs whose results, in MWh, are quantified and verified according to EM&V criteria as described below in section IV.D.8 of this preamble. EPA isalso discussing in this preamble, taking comment on for the federal plan, and proposing for the model trading rule a potential fourth category:	128-129	64990	Rate-based Implementation Approach	ERC Crediting

other low- and zero-emitting non-BSER measures that are described in section IV.C.3 of this preamble. The concept of using an ERC as a crediting mechanism to meet compliance obligations is consistent with the CPP EGs and is being adopted in this federal plan.				
As an example, assume a steam EGU operating in the second interim compliance period is subject to a rate standard of 1,500 lbs CO_2/MWh. Assume it operates at 2,000 lbs CO_2/MWh, and also assume it generates 1 million MWh over a compliance period. Its total emission rate would be 2 billion lbs CO_2 / 1 million MWh. In order to achieve the emission standard, it would need to purchase 333,334 ERCs (rounded to the nearest higher integer). In essence, this quantity of ERCs represents the quantity of MWh that need to be added to the steam EGU's denominator (i.e., generation, here, 1 million MWh), such that 2 billion pounds of CO_2 (total emissions), divided by total generation (i.e., in this case, 1,333,334 MWh) equals the emission rate for compliance (1,500 lbs/MWh). The discussion in this subsection builds on and applies the definition, benefits, use, and determination of using ERCs from the final EGs (section VIII of the final EGs). EPA invite comment on use of the approach just described as a method of implementation of a federal plan and a model trading rule, and EPA takes comment on any alternatives to this approach that still fall within the established criteria described in the CPP EGs. Comments that solely relate to determinations finalized in the EGs will be considered outside the scope of this proposed rule.	131-132	64991	Rate-based Implementation Approach	ERC Crediting
The EPA solicits comment on applying the least stringent regional factor to calculate GS-ERCs for all affected NGCC units subject to the federal plan and model rule on a national level. Conversely, the EPA	138	64993	Rate-based Implementation Approach	ERC Crediting

also requests comment on applying, for each region, its own regional GS-ERC generation rate. As proposed, the least stringent region could change from compliance period to compliance period. The EPA requests comment on whether a single "least stringent" region should be chosen and used for calculations or whether being "least stringent" should be evaluated on a compliance period by compliance period basis. The EPA also requests comment on whether "least stringent" should be evaluated on a year-to-year basis.				
The EPA also requests comment on whether the GS-ERC Emission Factor should be calculated on a unit by unit basis (as currently proposed) or be calculated based on the least stringent region's baseline 2012 average emission rate.	138	64993	Rate-based Implementation Approach	ERC Crediting
The EPA requests comment on the proposed approach and requests comment and suggestions on other approaches for existing NGCC units to generate GS-ERCs at all times. The EPA is considering this methodology that GS-ERCs are generated for all NGCC generation because it ensures that all existing NGCC units are encouraged to run at a greater capacity. The EPA is requesting comment on alternative methods to account for NGCC units generating GS-ERCs. Specifically, the EPA solicits comment on NGCC units generating GS-ERCs once a threshold of electric generation for the year is exceeded. This threshold is based on 2012 as a baseline and any NGCC generation beyond this threshold would be considered incremental generation.	141-142	64993	Rate-based Implementation Approach	ERC Crediting
The EPA also requests comment on whether a distinct type of ERC that comes with the proposed restrictions (i.e., GS-ERCs) is necessary to maintain the integrity of the rate-based trading proposal. Comments regarding this section that solely relate to	143	64994	Rate-based Implementation Approach	ERC Crediting

determinations finalized in the EGs will be considered outside the scope of this proposed rule.				
The agency requests comment on the inclusion of other emission reduction measures as eligible for ERC issuance under the rate-based federal plan. This may include other RE technologies not included above, such as distributed RE generation and various types of biomass. In this proposal, the EPA is also offering for comment treatment options for biomass fuels, if it is included as an eligible measure under the federal plan (see below).	146	64994	Rate-based Implementation Approach	ERC Crediting
The EPA requests comment on the inclusion of various types of demand-side EE as eligible measures for ERC issuance under the federal plan, such as state and utility EE programs, project-based demand-side EE, state building codes, state appliance standards, and conservation voltage reduction. The agency also requests comment on the inclusion of CHP as an eligible measure under the federal plan. Later in this section, the agency has provided detailed requirements for the issuance of ERCs for CHP, and EPA requests comment on these requirements for inclusion in the federal plan.	146	64994	Rate-based Implementation Approach	ERC Crediting
The EPA requests comment on the inclusion as eligible for ERC issuance under the federal plan of any other emission reduction measures beyond those mentioned here, as long as they meet the eligibility requirements outlined in the final EGs for rate-based crediting. For all of the above measures on which the EPA requests comment, the agency is particularly interested in comments on how EM&V methods can be implemented for these measures across applicable jurisdictions in the timeframe provided by this proposal in a way that is rigorous, straightforward, widely demonstrated, and in accordance with the EM&V requirements in this proposal, outlined in	147	64994	Rate-based Implementation Approach	ERC Crediting

section IV.D.8 of this preamble, and within the requirements outlined in the final guidelines (see section VIII.K.3 of the final EGs). It should also be noted that any eligible measure will be subject to the eligibility requirements outlined in this proposal and the final EGs, such as the requirement that the measure be incremental to 2012.				
The EPA acknowledges that as new technologies mature, there should be an avenue to add new technologies to this specified set of eligible measures under the federal plan. The agency is requesting comment on appropriate processes through which, after the federal plan is finalized, the EPA and/or stakeholders could demonstrate the appropriateness of new measure types and the EPA could evaluate and approve the demonstration so that a new measure type could be considered eligible for ERC issuance under the federal plan.	147	64995	Rate-based Implementation Approach	ERC Crediting
In this section, the EPA is also providing detailed requirements for CHP and waste heat power (WHP), these requirements are proposed under the model rule, and EPA requests comment on their inclusion in the federal plan. EPA is requesting comment on the inclusion of biomass and an option for the treatment of biomass in both the proposed rate-based federal plan and proposed rate-based model rule.	148	64995	Rate-based Implementation Approach	ERC Crediting
If biomass is included as an eligible measure, EPA istaking comment on an option for biomass treatment under the rate-based federal plan, which would also apply to eligible generation under the mass-based plan allowance set-aside and to the calculation of covered emissions for affected EGUs that are co-firing biomass. This option offered for comment is to specify a list of pre-approved qualified biomass fuels.	151	64995	Rate-based Implementation Approach	ERC Crediting
The pre-approved qualified biomass feedstocks list could be amended in the future as the science related to biogenic CO_2 emissions assessments evolves. The	151-152	64995	Rate-based Implementation Approach	ERC Crediting

EPA asks for comment on whether to include a provision that allows sources to seek approval for other types of biomass to be added to the pre-approved list and what that process would entail. For example, this process could include consideration of the production, processing and use of forest- and agriculture derived biomass fuels and related CO_2 benefits.				
The EPA also requests comment on options for how EGUs would demonstrate that feedstocks meet the requirements to be accepted as pre-approved qualified biomass feedstocks. These requirements could include demonstration of certification or verification of practices that are additional to other monitoring, reporting and EM&V requirements discussed in this proposal, such as provision of sufficient credible analysis of carbon benefits, third party verification and/or certification, or a determination of the net biogenic CO_2 effects related to the production, processing and use of the feedstock.	152	64996	Rate-based Implementation Approach	ERC Crediting
The EPA is proposing with respect to the rate-based model rule that Combined Heat and Power (CHP) units are eligible to generate ERCs. With respect to the federal plan, the EPA is requesting comment on the incorporation of non-affected CHP units. Electric generation from non-affected CHP units may be used to adjust the CO_2 emission rate of an affected EGU, as CHP units are low-emitting electric generating resources that can replace generation from affected EGUs. Electrical generation from non-affected CHP units that meet the eligibility criteria under section VIII.K.1.a of the Clean Power Plan preamble can be used to adjust the reported CO_2 emission rate of an affected EGU.	153-154	64996	Rate-based Implementation Approach	ERC Crediting
The EPA is proposing with respect to the rate-based model rule that waste heat power (WHP) units are eligible to generate ERCs. With respect to the	157	64996	Rate-based Implementation Approach	ERC Crediting

federal plan, the EPA is requesting comment on the incorporation of non-affected WHP units.				
The EPA also solicits comments on other potential accounting mechanisms for WHP.	158	64997	Rate-based Implementation Approach	ERC Crediting
If deemed savings are to be used in quantifying electricity savings from an EE program, project, or measure, EPA takes comment on the appropriate characteristics and presumptively approvable provisions for their use in generating qualifying ERCs, including the basis and frequency for their determination, and the appropriateness of their application to particular EE programs, projects or measures in particular states or regions.	213	65008	Rate-based Implementation Approach	ERC Crediting
EPA takes comment on the minimum and maximum intervals (in years) over which electricity savings must be quantified, including those time intervals specified in the proposed model rule, and EPA takes comment on any factors that must be taken into consideration when determining the appropriate time interval for specific EE programs, projects, or measures.	213-214	65008	Rate-based Implementation Approach	ERC Crediting
EPA takes comment on how to appropriately consider factors that affect energy savings in the quantification and verification process, including those identified in the proposed model rule, and EPA takes comment on whether these factors should be addressed in every plan or just certain types of plans. Such factors may include the effect of changes in independent factors, effective useful life (and its basis), and interactive effects of EE programs, projects, and measures.	214-215	65008	Rate-based Implementation Approach	ERC Crediting
For both the proposed federal plan and model rule, the EPA requests comment on which EM&V plan, measurement and verification (M&V) report, and verification report requirements should apply for each eligible resource. Further discussion	125	64990	Rate-based Implementation Approach	EM&V Requirements and Criteria

of non-BSER measures that may be eligible to generate ERCs can be found in the Clean Power Plan and section IV.C.3 of this preamble. (The EPA is not reopening its determination of the BSER.)				
The ERC resources proposed in the federal plan must meet the following criteria: 1) they are in the following categories of measures: on-shore wind, solar, geothermal power, hydropower, new nuclear units and capacity uprates at existing nuclear units, and 2) they can provide quantified generation data from a revenue quality meter. [...] the EPA requests comment on the inclusion of other RE measures, demand-side EE measures, and any other measures that may be eligible under the final guidelines as eligible measures under the federal plan. For stakeholders that are submitting comments on the inclusion of such additional measures, the EPA requests comment on how the EPA could implement across applicable jurisdictions a rigorous, straightforward, and widely demonstrated set of EM&V methods, procedures, and approaches that could be implemented in the time frame allowed by the federal plan and that also meet the requirements outlined in the final guidelines. To the extent proposed for inclusion in the model trading rule, EPA also invites comment on these requirements in the context of state implementation as part of a state plan. Thus, commenters on this aspect of the proposal should consider whether and how these provisions could be implemented at the state level.	184	65002	Rate-based Implementation Approach	EM&V Requirements
Each EM&V plan submitted in support of an eligibility application must identify the eligible resource covered by the plan, and provide specific EM&V criteria that specify the manner in which the energy generated or saved by the eligible resource will be quantified, monitored and verified. [...] Specifically, EPA seeks comment on the	189-190	65003	Rate-based Implementation Approach	EM&V Requirements

substantive content of the criteria, and EPA seeks comment on the level of detail provided and whether more or less detail (and what detail) should be included in the final model rule, and whether the criteria should differ for each eligible resource.				
The EPA requests comment on how existing reporting systems can play a role in meeting EM&V requirements under the federal plan, particularly, in assuring that each MWh of RE generation is uniquely identified and recorded to avoid double counting.	194-195	65004	Rate-based Implementation Approach	EM&V Requirements
The EPA requests comment on all metering, measurement, verification, and other requirements included in this subsection, including the appropriateness of their use for each type of RE resource (including the relevant size and distribution of such resource) that qualifies for issuance of ERCs for use in Clean Power Plan compliance.	195	65004	Rate-based Implementation Approach	EM&V Requirements
For RE resources with a nameplate capacity of 10 Kilowatt or more and for RE resources with a nameplate capacity of less than 10 Kilowatt for which metered data are available, EPA takes comment on the appropriateness of the requirement to use a revenue quality meter for monitoring generation, and EPA takes comment on the definition of revenue quality meter. EPA takes comment on the appropriateness of other types of meters for monitoring generation. EPA takes comment on whether 10 Kilowatt is the appropriate threshold, under which an eligible resource can be issued ERCs for generation based on data other than metered generation, and if not, what would be the appropriate threshold.	195-196	65004	Rate-based Implementation Approach	EM&V Requirements
For RE resources of all sizes and means of monitoring, EPA takes comment on the appropriate requirements for allowing generation data to be aggregated, including comment on the provisions in the proposed model rule and any	196	65004	Rate-based Implementation Approach	EM&V Requirements

alternatives to them. EPA takes comment on whether all of the generating units have the same essential generation characteristics, in order for their data to be aggregated, and if so, what the appropriate content of the definition of "essential generation characteristics" (e.g., are essential generating characteristics determined on a resource by resource basis, or can generation from a group of wind turbines be aggregated with generation from a group of solar panels? EPA seeks comment on the appropriate thresholds for the aggregated of individual units (e.g., nameplate capacity of less than 150 Kilowatt per unit and the units collectively do not exceed a total nameplate capacity of 1 MW when aggregated, as in the proposed model rule).				
For non-metered units of less than 10 Kilowatt, EPA takes comment on whether the final model rule should specify the specific estimating software or algorithms by which generation data should be measured, and if so, EPA takes broad comment on the appropriate estimating software or algorithms and/or the appropriate characteristics for such estimating software or algorithms.	196-197	65004	Rate-based Implementation Approach	EM&V Requirements
EPA requests comment on any other requirements that should be included in the final model rule regarding EM&V of RE resources.	197	65004	Rate-based Implementation Approach	EM&V Requirements
For all energy generating resources (such as RE, but also including applicable resources requiring EM&V described below), EPA takes comment on the appropriate place of measurement of the generation, including comment on whether measurement should be at the bus bar or at a different location (or in the case of meter on units of less than 10 Kilowatt, at the AC output of the inverter or elsewhere), whether measurement should be before or after parasitic load (and how to separate out parasitic load). In addition, for all energy generating	197	65004	Rate-based Implementation Approach	EM&V Requirements

resources, EPA takes comment on whether generation data should go through a control area settlement process prior to issuance of ERCs, and if so, what level of specificity with respect to that process EPA should include in the final model rule. If not, or if the unit does not go through a control areas settlement process, EPA takes comment on how the data collection should be specified in the final model rule. Finally, EPA takes comment on the frequency with which data should be collected, for all energy generating resources, of all sizes.				
The EPA requests comment on all metering, measurement, verification, and other requirements included in this subsection, including the appropriateness of their use for each type of nuclear energy resource (including the relevant size and distribution of such resource) that qualifies for issuance of ERCs for use in Clean Power Plan compliance. EPA takes comment on whether nuclear energy resources should be subject to the same EM&V requirements as RE resources, and if not, EPA takes comment on to which EM&V requirements nuclear energy resources should be subject.	198	65004	Rate-based Implementation Approach	EM&V Requirements
The EPA requests comment on all metering, measurement, verification, and other requirements included in this subsection with respect to CHP, including the appropriateness of their use for CHP (including with respect to the size of the CHP resource). EPA takes comment on whether a CHP unit should be subject to the same EM&V requirements as RE resources, and EPA takes comment on any additional EM&V requirements to which CHP units should be subject. Specifically, EPA takes comment on specifying in the final model rule that if a CHP unit has an electric generating capacity greater than 25 MW, its EM&V plan must specify that it will meet the requirements that apply to an affected EGU under 40 CFR 62.16540. EPA also	199	65005	Rate-based Implementation Approach	EM&V Requirements

takes comment on specifying in the final model rule that if a CHP unit has an electric generating capacity less than or equal to 25 MW, the EM&V plan must specify that it will meet the low mass emission unit CO_2 emission monitoring and reporting methodology in 40 CFR part 75. EPA takes comment on any alternatives to these measurement methodologies that should be specified in the final model rule. EPA takes comment on any other requirements that should be included in the final model rule regarding EM&V of CHP.				
The EPA requests comment on all metering, measurement, verification, and other requirements included in this subsection with respect to biomass, including the appropriateness of their use for qualified biomass. EPA takes broad comment on the types of qualifying biomass feedstocks that should be specified in the final model rule, if any. EPA takes comment on the methods that EPA should specify in the final model rule for the measurement of the associated biogenic CO_2 for such feedstocks, as well as what other requirements EPA should specify in the final model rule related to qualified biomass. EPA takes comment on any other requirements that should be included in the final model rule regarding EM&V for qualified biomass. Detailed discussion on the role of qualified biomass feedstocks can be found in section IV.C.3 of this preamble.	201	65005	Rate-based Implementation Approach	EM&V Requirements
The EPA requests comment on all metering, measurement, verification, and other requirements included in this subsection with respect to waste-to-energy, including the appropriateness of their use for waste-to-energy. EPA takes comment on whether a waste-to-energy resource should be subject to the same EM&V as RE resources, and EPA takes comment on any additional EM&V requirements to which waste-to-energy resources should be subject, including	202	65005	Rate-based Implementation Approach	EM&V Requirements

comment on any specific methods for determining the specific portion of the total net energy output from the resource that is related to the biogenic portion of the waste that the EPA should include in the final model rule.				
The EPA is soliciting comment on the incorporation of EE for the federal plan and by extension the EM&V associated with it.	203	65005	Rate-based Implementation Approach	EM&V Requirements
EPA takes broad comment on each EE EM&V criterion described herein and in the proposed rule text, for each type of EE activity, project, program, or measure. Specifically, EPA seeks comment on the substantive content of the criteria, and EPA seeks comment on the level detail provided regarding these criteria and whether more or less detail (and what detail) should be included in the final model rule. In addition, EPA seeks comment on whether some of the EE EM&V criteria (and if so, which criteria) included in the draft guidance document released simultaneously with this proposed rulemaking should instead be included in the final model rule, instead of in guidance. Similarly, EPA seeks comment on whether some of the EE EM&V criteria (and if so, which criteria) included in the proposed model rule should instead be addressed in the final EM&V guidance. More generally, EPA seeks comment on what EE criteria the EPA should described in guidance versus what criteria the EPA should specify in the final model, whether or not those criteria are already included in the draft guidance or draft model rule.	211	65007	Rate-based Implementation Approach	EM&V Requirements
EPA takes broad comment on the appropriate EE EM&V criteria for quantifying the electricity savings from every type of EE program, project, or measure. EPA takes broad comment on what constitute EE best-practice protocols and procedures for every type of EE program, project, or measure.	212	65007	Rate-based Implementation Approach	EM&V Requirements

EPA takes broad comment on whether, when, and how common practice baselines should and should not be used in calculating electricity savings from EE activities, projects, programs, and measures, including comment on which common practice baselines should be used in which circumstances. EPA also takes comment on whether some alternative metric should be used in lieu of the common practice baseline and, if so, what that metric should be.	212	65007	Rate-based Implementation Approach	EM&V Requirements
EPA takes broad comment on the appropriateness of quantifying electricity savings by applying one or more of the following methods and comment on all aspects of each method: project-based measurement and verification (PB-MV), comparison group approaches, or deemed savings. EPA takes further comment on circumstances in which it is appropriate (or inappropriate) to use each of these methods, including when it is appropriate to use random control trials (RCT) and quasi-experimental methods, and the circumstances in which they can be encouraged and applied in practice (e.g., when a suitable control or comparison group can be identified and applied in a cost-effective manner). In addition, EPA takes comment on whether the general suitability and application of quantification methods, such as RCT, quasi-experimental techniques or other comparison group approaches when they are available at reasonable cost for purposes of quantifying MWh savings for particular EE programs, projects, or measures.	212	65007	Rate-based Implementation Approach	EM&V Requirements
EPA takes comment on the circumstances and frequency in which savings verification must occur to ensure that EE measures have been installed, are functioning, and have the potential to save energy. EPA takes comment on the appropriate steps for avoiding double counting, and how such steps should be documented in an EM&V plan. In	215	65008	Rate-based Implementation Approach	EM&V Requirements

particular, EPA takes comment on the circumstances and conditions in which double counting is most likely to occur (including those identified in this section), and the presumptively approvable provisions that must be adopted in state plans for avoiding and mitigating double counting.				
EPA takes comment on the appropriate means by which an EM&V plan can ensure the accuracy and reliability of electricity savings estimates, including the necessary rigor of the methods selected to evaluate the electricity savings, the methods used to control all relevant types of bias and to minimize the potential for systematic and random error, and the potential effects of such bias and error. EPA further takes comment on the presumptively approvable provision that samples taken to quantify EE program savings must achieve 90/10 confidence and precision.	215-216	65008	Rate-based Implementation Approach	EM&V Requirements
EPA takes comment on the presumptively approvable approach to quantifying the electricity savings that result from avoiding a transmission and distribution system loss, including the provisions in the proposed model rule, which specify that each EM&V plan must quantify the transmission and distribution loss based on the lesser of 6 percent of the site-level electricity consumption measured at the end use meter or the statewide annual average transmission and distribution loss rate (expressed as a percentage) from the most recent year that is published in the U.S. EIA State Electricity Profile. EPA takes comment on the appropriateness of including a restriction in the final model rule that no other transmission and distribution loss factors may be used in calculating the electricity savings.	216	65008	Rate-based Implementation Approach	EM&V Requirements
EPA takes comment on any additional criteria that EPA should include in the final model rule regarding EE EM&V.	216	65008	Rate-based Implementation Approach	EM&V Requirements
The EPA solicits comments on whether the subcategorized rate approach is the	127-128	64990	Rate-based Implementation	Use of Subcategorize

preferred rate-based approach for the federal plan and model trading rule. If a subcategorized approach for a rate-based model rule and federal plan is not preferred by commenters, the EPA requests comment on the perceived benefits of an alternative rate or set of rates (e.g., applying a uniform rate, i.e., the state goal, to all affected units within the state as the EGUs' emission standard).			Approach	d Rate Approach
A variety of situations may result in such improper ERC issuance, ranging from simple paperwork errors to outright fraud. The EPA requests comment on ways that the EPA could safeguard the validity of an ERC.	130	64991	Rate-based Implementation Approach	ERC Issuance
The EPA requests comment on each component of the trading system that is proposed in this preamble and the associated model rule, the trading program as a whole, and specifically requests comment on means to expedite the process of issuing ERCs, any minimum and maximum periods for which ERCs should be issued (e.g., monthly, quarterly, annually), and any means to ensure that the ERCs issued meet the requirements of the EGs and these proposed rules. The rate-based federal plan and model rule borrow many concepts from other successful trading programs, and the agency is interested in receiving additional information through comments on successful implementation of similar programs.	159-175	64997	Rate-based Implementation Approach	ERC Issuance
As another option, the EPA, or a state under the model trading rule, could adjust their targets to achieve the same stringency, taking into account the additional borrowed ERCs. The EPA requests comments on all potential methods to adjust state targets, including modeling-based approaches, and on what information the state must present to demonstrate that the new targets preserve the needed stringency. More generally, the EPA requests comments on these ideas, as well as on alternatives for	178	64501	Rate-based Implementation Approach	CEIP and Early Action ERCs

maintaining the stringency of a rate-based plan implementing the CEIP so as to have no impact on the aggregate emission performance of sources required to meet rate-based emission standards during the compliance periods.				
The EPA proposes the following framework to implement the Clean Energy Incentive Program (CEIP) in the rate-based federal plan. First, the EPA proposes to implement a mechanism for issuing early action ERCs for eligible RE projects that commence construction and eligible EE projects that commence implementation after September 6, 2018 and that generate zero-emitting MWh or reduce end-use energy demand during 2020 and/or 2021. These projects must be located in or benefit the state on whose behalf the EPA is implementing the federal plan. The EPA proposes to design this mechanism in a manner that would have no impact on the aggregate emission performance of sources required to meet rate-based emission standards during the compliance periods. The EPA requests comment on the structure of this mechanism, which could include adjusting the stringency of the emission standards during the compliance periods to account for the issuance of early action ERCs for MWh generated or avoided in 2020 and/or 2021.	177	65000	Rate-based Implementation Approach	CEIP and Early Action ERCs
Second, the agency proposes to create an account of "matching" ERCs for each state participating in the CEIP – regardless of whether a state is implementing a state plan or the agency is implementing a federal plan on its behalf. This distribution would reflect each state's pro rata share – based on the amount of the reductions from 2012 levels the affected EGUs in the state are required to achieve relative to those in the other participating states – of a federal pool of additional ERCs, which would be limited to the equivalent of 300 million short tons of CO_2 emissions. Thus, states whose EGUs	179	65001	Rate-based Implementation Approach	CEIP and Early Action ERCs

have greater reduction obligations will be eligible to secure a larger proportion of the federal pool upon demonstration of quantified and verified MWh of RE generation or demand side-EE savings from eligible projects realized in 2020 and/or 2021. The EPA intends that a portion of these matching ERCs would be reserved for eligible wind and solar projects, and a portion would be reserved for eligible EE projects implemented in low-income communities. The agency recognizes that there have been historic economic, logistical and information barriers to implementing EE programs in these communities, and therefore believes it is appropriate to reserve a portion of the federal pool to incentivize investment in these programs. The EPA is requesting comment on the size of reserve of matching ERCs for eligible low-income EE programs as well as for eligible wind and solar projects.				
The EPA is proposing that unused ERCs in either reserve would be redistributed among participating states. This redistribution could be executed according to the pro-rata method discussed above. Alternatively, unused matching EE or RE ERCs could be swept back into a federal pool and distributed to project providers on a first-come, first served basis. EPA requests comment on these ideas as well as alternative proposals regarding the method for redistributing matching ERCs, as well as the appropriate timing for such redistribution.	179	65001	Rate-based Implementation Approach	CEIP and Early Action ERCs
The EPA requests comment on the proposed necessary requirements for an independent verifier to perform verification services in connection with the federal plan, including those requirements specifically detailed in this section of the preamble and the related language in the proposed model rule, and including whether there are any requirements that are not included in this	183	65002	Rate-based Implementation Approach	Independent Verifiers

proposal that should be included in the final rule. EPA further requests comment on the level of detail that the Agency should include in the final model rule regarding all requirements for independent verifiers, and all aspects of verification.				
Once the compliance period has ended, affected EGUs would have a window of opportunity to evaluate their reported emissions and obtain any ERCs that they might need to cover their emissions during the compliance period. The agency proposes to require sources to demonstrate compliance, i.e., ERC true-up, on November 1 of the year after the last year in the compliance period. For example, if the first compliance period comprises the three years 2022, 2023, and 2024, then the ERC transfer deadline for that first compliance period (after which point the EPA would evaluate compliance) would be on November 1, 2025. The agency also requests comment on an earlier ERC transfer deadline, such as June 1 or March 1, of the year after the last year in the compliance period.	220	65009	Rate-based Implementation Approach	Emission Standards Compliance
The EPA is proposing to allow unlimited banking of ERCs within and between the interim and final compliance periods. This means that if an affected EGU has more ERCs than are necessary during true-up, it may save (i.e., bank) those ERCs for application during a future compliance period. The EPA requests comment on whether there should be a quantitative limit or cap on the number of ERCs that can be banked. The EPA also requests comment on whether an ERC should be eligible to be banked between the interim and final compliance periods. The EPA is also proposing that ERCs will not expire after any duration of time. Other trading rules that the EPA has instituted (e.g., CSAPR) do not have expiration on the tradable properties. The EPA requests comment on the shelf-life of an ERC.	224	65010	Rate-based Implementation Approach	ERC Banking

ERC "borrowing" is a flexibility that the EPA is not proposing, but is soliciting comment on. ERC borrowing is the concept that an affected EGU may use an ERC that the EGU will acquire in a future compliance period to meet its current compliance obligations. The EPA requests comment on a methodology that would allow ERC borrowing while maintaining the integrity of the compliance obligations. The EPA also has reservations due to the fact that future ERC generation is not guaranteed.	225	65010	Rate-based Implementation Approach	ERC Borrowing
The EPA also requests comment on requiring monitoring and reporting of CO_2 mass and net generation for the year before the initial compliance period begins, i.e., to commence January 1, 2021. Only monitoring and reporting would be required in 2021 — compliance with an enforceable emission standard would commence on the compliance period schedule that is detailed in section III.D of this preamble.	227	65010	Rate-based Implementation Approach	Monitoring and Reporting