

Proposed Clean Power Plan for Existing Power Plants

Listing of U.S. Environmental Protection Agency Requests for Comment*

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Environmental Protection Agency

40 CFR Part 60

Carbon Pollution Emission Guidelines for Existing Stationary Sources:

Electric Utility Generating Units; Proposed Rule

*Please note: comments must be received on or before October 16, 2014.

Category	Comment	Page No. in <i>Federal Register</i>
General	The EPA is offering the opportunity to comment on the proposed BSER, the proposed methodology for computing state goals based on application of the BSER, and the state-specific data used in the computations.	34835
General	The EPA invites further input through public comment on all aspects of this proposal.	34835
Compliance Time	The agency is also requesting comment on an alternative option, a 5-year period for compliance, in combination with a less stringent set of CO ₂ emission performance levels.	34839
Building Blocks	The EPA is also seeking comment on different combinations of building blocks and different levels of stringency for each building block.	34839
Stakeholder Proposals	During the EPA's public outreach in advance of this proposal, a number of ideas were put forward that are not fully reflected in this proposal. We invite public comment on these ideas, some of which are outlined below.	34847
Stakeholder Proposals	Other stakeholders suggested that an "inside the fence" plant- or unit-specific assessment linked to the availability of control at the source such as heat rate improvements should be considered. They indicated that once plant-specific goals are established based on on-site CO ₂ reduction opportunities, the source should have the flexibility to look "outside the fence" for the means to achieve the goals, including the use of emissions trading and averaging. The EPA invites comment on these suggestions.	34848
Legal Interpretation	The EPA discusses its legal interpretation in more detail in other parts of this preamble and discusses certain issues in more detail in the Legal Memorandum included in the docket for this rulemaking. The EPA solicits comment on all aspects of its legal interpretations, including the discussion in the Legal Memorandum.	34853

Tribal	The EPA invites comment on whether a tribe wishing to develop and implement a CAA section 111(d) plan should have the option of including the EGUs located in its area of Indian country in a multi-jurisdictional plan with one or more states (i.e., treating the tribal lands as an additional state).	34854
Tribal	If the EPA develops one or more CAA section 111(d) federal plans for areas of Indian country with affected EGUs, we are likewise currently considering doing so on a multi-jurisdictional basis in coordination with nearby states developing CAA section 111(d) plans. The EPA solicits comment on such an approach for a federal plan.	34854
Tribal	We invite comment on how the BSER should be applied to potentially affected EGUs in Indian country.	34855
Tribal	We particularly invite comment on data sources for setting renewable energy and demand-side energy efficiency targets.	34855
Tribal	The state-specific goals that the EPA is proposing are based on the collection of affected EGUs located within that state. In setting goals specific to an area of Indian country, the EPA proposes to base the goals on the collection of affected EGUs located within that area of Indian country. We request comment on this approach.	34855
Combining Categories	The EPA is soliciting comment on combining the two existing categories for the affected EGUs into a single category for purposes of facilitating emission trading among sources in both categories.	34855
Combining Categories	The EPA is proposing emission guidelines for the two categories and is soliciting comment on combining the two categories into a single category for purposes of the CO ₂ emissions from existing affected EGUs.	34855
Combining Categories	The EPA solicits comment on whether combining the two categories would offer additional flexibility, for example, by facilitating implementation of CO ₂ mitigation measures, such as shifting generation from higher to lower-carbon intensity generation among existing sources (e.g., shifting from boilers to NGCC units) or facilitating emissions trading among sources.	34855
Building Blocks	We are proposing that the basis for supporting the BSER should include heat rate improvements only at coal-fired steam EGUs, but we are inviting comment on including heat rate improvements at other EGU types.	34856
Building Blocks	As noted later in this preamble, we are seeking comment on the extent to which existing EGUs could implement CCS in order to improve our understanding.	34857
Building Blocks	Gas conversion or co-firing would be available to states and sources as a compliance option, and, as noted later in the preamble, we are seeking comment on whether this option should be considered part of the BSER.	34857
Building Blocks	As noted in Section VI.C.5.d below, we are requesting comment on including heat rate improvement opportunities at other EGU types in the basis for supporting the BSER.	34859
Building Blocks	We believe a reasonable estimate for purposes of developing state-specific goals is that affected coal-fired steam EGUs on average could achieve a four percent improvement in heat rate through adoption of best practices to reduce hourly heat rate variability. This estimate corresponds to the elimination, on average across the fleet of affected EGUs, of 30 percent of the deviation from top-decile performance in the hourly heat rate for each EGU not attributable to hourly temperature and load variation. We also solicit comment on the use of estimates up to six percent, reflecting elimination on average of 50 percent of the deviation from top-decile performance.	34860

Building Blocks	We propose to use as a data input for purposes of developing state goals an estimate that, on average across the fleet of affected EGUs, only half of the full equipment upgrade opportunity remains—i.e., that for the fleet of affected EGUs as a whole, the technical potential for heat rate improvements from equipment upgrades incremental to the best-practices opportunity is on average two percent rather than four percent. We solicit comment on increasing this figure up to four percent.	34860
Building Blocks	Based on the analyses of technical potential and cost summarized above, we propose to find that a six percent reduction in the CO ₂ emission rate of the coal-fired EGUs in a state, on average, is a reasonable estimate of the amount of heat rate improvement that can be implemented at a reasonable cost. However, as discussed in Section VI.C.5.d below, we are requesting comment on this aspect of the proposal. Further, states and sources would be free to use heat rate improvements at those other units to help reach the state goals.	34862
Building Blocks	We invite comment on all aspects of our analyses and findings related to heat rate improvements, both as summarized here and as further discussed in the Greenhouse Gas Abatement Measures TSD.	34862
Building Blocks	As noted earlier, we specifically request comment on increasing the estimates of the amounts of heat rate improvement achievable through adoption of best practices for operation and maintenance and through equipment upgrades up to six percent and four percent, respectively, representing a total potential improvement of up to ten percent, particularly in light of the reasonable cost of heat rate improvements.	34862
Building Blocks	We also solicit comment on the quantitative impacts on the net heat rates of coal-fired steam EGUs of operation at loads less than the rated maximum unit loads.	34862
Building Blocks	We invite comment on whether the regional or state scenarios should be given greater weight in establishing the appropriate degree of re-dispatch to incorporate into the state goals for CO ₂ emission reductions, and in assessing costs.	34865
Building Blocks	We invite comment on whether we should consider options for a target utilization rate for existing NGCC units greater than the proposed 70 percent target utilization rate.	34866
Building Blocks	We invite comment on the findings regarding the potential for increased utilization of existing NGCC units to support the BSER and on all other issues raised by the discussion above and the related portions of the Greenhouse Gas Abatement Measures TSD.	34866
Building Blocks	We invite comment regarding the treatment of Alaska and Hawaii as part of this method for developing annual RE generation levels.	34867
Building Blocks	For some states, the RE generation targets developed using the proposed approach are less than the states' reported RE generation amounts for 2012. We invite comment on whether the approach for quantifying the RE generation component of each state's goal should be modified to include a floor based on reported 2012 RE generation in that state.	34868
Building Blocks	The EPA invites comment on whether the approach for quantifying the RE generation component of each state's goal should be modified so that the difference between a state's RE generation target and its 2012 level of corresponding RE generation does not exceed the state's reported 2012 fossil fuel-fired generation.	34868- 34869

Building Blocks	With regard to hydropower, we seek comment regarding whether to include 2012 hydropower generation from each state in that state’s “best practices” RE quantified under the proposed approach, and whether and how the EPA should consider year-to-year variability in hydropower generation if such generation is included in the RE targets quantified as part of BSER. Chapter 4 of the GHG Abatement Measures TSD presents state RE targets both with and without the inclusion of each state’s 2012 hydropower generation.	34869
Building Blocks	We invite comment on the proposed approach to treatment of renewable generating capacity as a basis for the best system of emission reduction adequately demonstrated and for quantification of state goals.	34869
Building Blocks	We invite comment on the alternative approach to quantification of RE generation to support the BSER described on pages 34869-70. We note that the three specific requests for comment made above with respect to the proposed quantification approach— addressing, first, the possibility of a floor based on 2012 RE generation, second, the possibility of a limitation based on 2012 fossil fuel-fired generation and, third, the treatment of hydropower generation—apply to this alternative approach as well.	34870
Building Blocks	The EPA invites comment on other possible techno-economic approaches to quantification of RE generation to support the BSER. For example, a conceptual framework for another techno-economic approach is provided in the Alternative RE Approach TSD.	34870
Building Blocks	We request comment on whether it is appropriate to reflect completion of the five identified nuclear EGUs currently under construction in the state goals and on alternative ways of considering these units when setting state goals.	34870
Building Blocks	We invite comment on all aspects of the approach discussed for treatment of nuclear generation. In addition, we specifically request comment on whether we should include in the state goals an estimated amount of additional nuclear capacity whose construction is sufficiently likely to merit evaluation for potential inclusion in the goal-setting computation.	34871
Building Blocks	As discussed in Section VII.E below, the EPA is also taking comment on a less stringent alternative for setting state goals.	34873
Building Blocks	We invite comment on all aspects of our data and methodology for estimating the potential for demand-side energy efficiency to support the BSER as discussed in the preamble and in the TSD, as well as on the level of reductions we propose to define as best practices suitable for representation consistent with the best system of emission reduction and the level reflected in the less stringent scenario.	34875
Building Blocks	For demand-side EE, we also specifically invite comment on several issues: (1) Increasing the annual incremental savings rate to 2.0 percent and the pace of improvement to 0.25 percent per year to reflect an estimate of the additional electricity savings achievable from state policies not reflected in the 1.5 percent rate and the 0.20 percent per year pace of improvement, such as building energy codes and state appliance standards, (2) alternative approaches and/or data sources (i.e., other than EIA Form 861) for determining each state’s current level of annual incremental electricity savings, and (3) alternative approaches and/or data sources for evaluating costs associated with implementation of state demand-side energy efficiency policies.	34875

Building Blocks	We solicit comment on whether natural gas co-firing or conversion should be part of the BSER.	34876
Building Blocks	We also request comment regarding whether, and, if so, how, we should consider the co-benefits of natural gas co-firing in making the BSER determination.	34876
Building Blocks	The EPA does solicit comment on all aspects of applying CCS to existing fossil fuel-fired EGUs (in either full or partial configurations), but does not expect to finalize CCS as a component of the BSER in this rulemaking.	34876
Building Blocks	We invite comment on whether we should consider construction and use of new NGCC capacity as part of the basis supporting the BSER.	34877
Building Blocks	We request comment on ways to define appropriate state-level goals based on consideration of new NGCC capacity.	34877
Building Blocks and U.S. territories	We invite comment on whether heat rate improvements for one or more types of non-coal fossil fuel-fired EGUs should be identified as a basis for supporting the BSER, with particular reference to U.S. territories.	34877
Building Blocks	We invite comment on a potential BSER comprising a combination of building blocks 1 and 2.	34878
Building Blocks	The EPA invites comment on a potential BSER comprising building blocks 1 and 2, in light of the considerations that could support this approach.	34885
Building Blocks	In recognition of stakeholders' expressed concerns, we invite comment on whether there are special considerations affecting small rural cooperative or municipal utilities that might merit adjustments to this proposal, and if so, possible adjustments that should be considered.	34887
Building Blocks	We note that some stakeholders have argued that CAA section 111(a)(1) does not authorize the EPA to identify redispatch, low- or zero-emitting generation, or demand-side energy efficiency measures (building blocks 2, 3, and 4) as components of the "best system of emission reduction . . .adequately demonstrated." According to these stakeholders, as a legal matter, the BSER is limited to measures that may be undertaken at the affected units, and not measures that are beyond the affected units; the measures in building blocks 2, 3, and 4 are "beyond-the-unit" or "beyond-the-fenceline" measures because they are implemented outside of the affected units and outside their control; and as a result, those measures cannot be considered components of the BSER. We welcome comment on this issue.	34888
Building Blocks	The EPA solicits comment on whether measures in addition to those in building blocks 2, 3, and 4 could support the showing that reduced utilization is "adequately demonstrated," including additional NGCC capacity that may be built in the future, as discussed in Section VI.C.5.c above.	34890
Building Blocks	As discussed above, the EPA is soliciting comment on combining the category of steam EGUs and the category of combustion turbines (which include NGCC units) into a single category for fossil fuel-fired EGUs, for purposes of promulgating emission guidelines for CO ₂ emissions.	34892
Building Blocks	The EPA solicits comment on whether combining the categories is, as a legal matter, a prerequisite for (i) identifying as a component of the BSER re-dispatch between sources in the two categories (i.e., re-dispatch between steam EGUs and NGCC units), or (ii) facilitating averaging or trading systems that include sources in both categories, which states may wish to adopt.	34892

Building Blocks	We invite comment on all aspects of our proposed interpretation and alternate interpretation of the BSER for CO ₂ emissions from existing fossil fuel-fired EGUs, both as identified above and as further discussed in the Legal Memorandum in the docket. In particular, we invite comment on our analysis of the four building blocks as components of the BSER, whether any other potential measures should be considered, our analysis of the combinations of building blocks 1 and 2 and of all four building blocks, and the legal, technical, and economic bases of our conclusions.	34892
Building Blocks	Some commenters noted that trading programs like RGGI have been successful at reducing GHGs, and other commenters provided specific BSER proposals based on trading and/or emissions averaging approaches. We specifically request comment on whether any of these approaches should be considered as the BSER.	34892
Building Blocks	We also specifically invite comment on the question, raised by some stakeholders, as to whether if measures may be relied on in the state plan to achieve emission reductions, they cannot be excluded from the scope of the BSER solely because they involve actions by entities or at locations other than affected sources.	34892
State Goals	We are requesting comment on a second set of state-specific goals that would reflect less stringent application of the same BSER, in this case by 2025, with interim goals that would apply over a 2020–2024 phase-in period.	34892
State Goals	As noted in Section VI.C.5.d above, we are requesting comment on whether heat rate improvements for non-coal fossil fuel-fired EGUs should be part of the basis supporting the BSER, with particular reference to the situation of geographically isolated jurisdictions such as the U.S. territories.	34893
State Goals	A state’s inability to meet the level of emission reductions anticipated through use of one building block may free up resources that the state could then devote to more stringent implementation of another building block. This approach would mean that overall, the same nationwide level of emission reductions as proposed would be achieved. The EPA invites comment on this aspect of the proposal.	34893
State Goals	With respect to U.S. territories, the EPA is currently aware of potentially affected EGUs in Puerto Rico, the U.S. Virgin Islands, and Guam. The EPA requests comment on how the BSER would apply to these territories, as well as to American Samoa or the Northern Mariana Islands if potentially affected EGUs are subsequently identified in those territories. In particular, the EPA solicits comment on appropriate alternatives for territories that do not have access to natural gas.	34893
State Goals	Because the data sources we have used for purposes of establishing renewable energy and demand-side energy efficiency targets for states do not cover all of the U.S. territories, we also solicit comment on ways to determine appropriate renewable energy and demand-side energy efficiency targets using other data sources.	34893
State Goals	We also recognize that at present EGUs report gross rather than net load 257 to us under 40 CFR Part 75, and that the proposed GHG standards of performance for new EGUs are expressed in terms of gross generation (although we sought comment on the use of net generation instead). We therefore specifically seek comment on whether the goals and reporting requirements for existing EGUs should be expressed in terms of gross generation instead of net generation for consistency with existing reporting requirements and with the proposed requirements under the GHG standards of performance for new EGUs.	34894- 34895

State Goals	We invite comment on all aspects of the proposed form of the goals.	34895
State Goals	The details of how states could attain emission performance levels consistent with the goals through different state plan approaches that recognize emission reductions achieved through all the building blocks are discussed further in Section VIII on state plans. We invite comment on all aspects of the goal computation procedure. (Note that we also invite comment on certain specific alternate data inputs to the procedure in Section VI.C above). We also specifically invite comment on the state-specific historical data to which the building blocks are applied in order to compute the state goals, as well as the state-specific data used to develop the state-specific data inputs for building blocks 3 and 4.	34896-34897
State Goals	With respect to building block 2, we specifically request comment on the following alternate procedure: In Step 3, to the extent that generation from a state's NGCC group was increased consistent with the NGCC utilization rate target, in order to maximize the resulting emission reductions, we would decrease generation from the state's coal-fired steam group first, and then decrease generation from the state's oil/gas-fired steam group (instead of decreasing generation from the coal-fired steam and oil/gas-fired steam groups proportionately).	34897
State Goals	With respect to building block 4, we specifically invite comment on the alternative in Step 5 of scaling up the estimated reduction in the generation by affected EGUs in net electricity exporting states to reflect an expectation that a portion of the generation avoided in conjunction with the demand-side energy efficiency efforts of other, net electricity-importing states would occur at those EGUs, analogous to the proposed adjustment for net electricity importing states described in Step 5.	34897
State Goals	We also request comment on the alternative of making no adjustment in Step 5 for either net electricity-importing or net electricity-exporting states.	34897
State Goals	We also request comment on whether CO ₂ emission reductions associated with other measures not currently included in any of the four proposed building blocks should be included in the state goals.	34897
State Goals	States have the opportunity to comment on the proposed BSER, the proposed methodology for computing state goals based on application of the BSER, and the state-specific data that is proposed for use in the computations. We expect that the states will have an adequate opportunity to comment on the state goals during the comment period.	34898
State Goals	In addition to the proposed statespecific emission rate-based goals described above, the EPA has developed for public comment an alternate set of goals reflecting less stringent application of the building blocks and a shorter implementation period. The alternate final goals represent emission performance that would be achievable by 2025, after a 2020–2024 phase-in period, with interim goals that would apply during the 2020–2024 period on a cumulative or average basis as states progress toward the final goals.	34898
State Goals	Accordingly, we request comment on the alternate goals, particularly with respect to whether any one or all of the building blocks in the alternate goals can be applied at a greater level of stringency: Can the heat rate improvement value be set at a level above four percent, even six percent? Can NGCC capacity be dispatched at a utilization rate above 65 percent? Can annual incremental electricity savings be achieved at a rate higher than one percent?	34898-34899

State Goals	We request comment on whether, and if so how, the EPA should incorporate greater consideration of multi-state approaches into the goal setting process, and on the issue of whether, and if so how, the potential cost savings associated with multi-state approaches should be considered in assessing the reasonableness.	34899
State Goals	The flexibility inherent in the rule is responsive to the CAA’s recognition that state plans for emission reduction can, and must, be consistent with a vibrant and growing economy and reliable, affordable electricity to support that economy. The EPA welcomes comments and suggestions on this issue.	34900
State Plans	The agency is soliciting comment on aspects of such CAA section 111(d) plans, as described in Section V.D of this preamble.	34900
State Plans	With this in mind, we are proposing to provide states with additional time to submit complete plans if they do so as part of a multistate plan, and we solicit comment on other potential mechanisms for fostering multi-state collaboration.	34900
State Plans	The EPA requests comment on this proposed approach, as opposed to the approach under which state plans simply would be required to hold the affected EGUs fully and solely responsible for achieving the emission performance level.	34901
State Plans	In addition, the EPA is soliciting comment on several other types of state plans that may assure the requisite level of emission performance without rendering certain types of measures federally enforceable and that limit the obligations of the affected EGUs.	34901
State Plans	The EPA is also soliciting comment on whether it can reasonably interpret CAA section 111(d)(1) to allow states to adopt plans that require EGUs and other entities to be legally responsible for actions required under the plan that will, in aggregate, achieve the emission performance level.	34901
State Plans	EPA requests comment on what we refer to as a “state commitment approach.” This approach differs from the proposed portfolio approach, described above, in one major way: Under the state commitment approach, the state requirements for entities other than affected EGUs would not be components of the state plan and therefore would not be federally enforceable. Instead, the state plan would include an enforceable commitment by the state itself to implement state-enforceable (but not federally enforceable) measures that would achieve a specified portion of the required emission performance level on behalf of affected EGUs. The agency requests comment on the appropriateness of this approach.	34902
State Plans	The agency also requests comment on the policy ramifications of the following: Under this approach, the state programs upon which the state bases its commitment may, in turn, rely on compliance by third parties, and if those state programs fail to achieve the expected emission reductions, the state could be subject to challenges— including by citizen groups— for violating CAA requirements and, as a result, could be held liable for CAA penalties.	34902
State Plans	We also solicit comment on a variation of this state commitment plan approach that is also designed to address stakeholder concerns, noted above, about imposing sole legal responsibility on affected EGUs for achieving the emission performance level.	34902
State Plans	We solicit comment on whether, if the EPA were to conclude that CAA section 111(d) requires state plans to include standards of performance applicable to affected EGUs that achieve the emission performance level, this type of state plan would meet that requirement while also assuring those E.	34902

State Plans	The EPA also requests comment on another approach: Whether “standards of performance for [affected sources]” is reasonably read to include the emission performance level (i.e., the state goal) on grounds that the level is “a standard for emissions” because it is in the nature of a requirement that concerns emissions and it is “for” the affected sources because it helps determine their obligations under the plan.	34903
State Plans	We solicit comment on the extent to which measures such as RE and demand-side EE may be considered “implement[ing]” measures in state plans if they are not directly tied to emission reductions that affected sources are required to make through emission limits, and if they are requirements on entities other than the affected sources.	34903
State Plans	The EPA solicits comment on all aspects of its proposed interpretation that states have this flexibility in selecting measures for their state plans under CAA section 111(d).	34903
State Plans	This alternative interpretation would be based on, for example: A determination that CAA section 111(d)(1) must be read as precluding a state plan from including measures that are neither standards of performance nor measures for the implementation or enforcement of such standards; an interpretation that the state’s obligation to set performance standards “for” existing sources means that the standards must apply to affected EGUs and not to other entities; and an interpretation that measures “for the implementation and enforcement of such performance standards” do not include measures that are not intended or designed to assist affected EGUs in meeting the performance standards. The EPA requests comment on whether it must adopt this alternative interpretation. If so, the EPA also takes comment on whether there is a way, nonetheless, to allow states to rely on the portfolio approach to some extent and/or for some period of time.	34903
State Plans	We request comment on all of the interpretations discussed in this section generally, and on all legal issues under CAA section 111(d)(1) with respect to what measures can be included in a state plan and what entities must be legally responsible for meeting those measures.	34903
State Plans	The EPA invites comments on this interpretation of CAA section 111(d)(1), including whether this interpretation is supported by the statutory text and whether this interpretation is sensible policy and will further the goals of the statute.	34904
State Plans	In Section VIII.B.2.f of this preamble, the agency also requests comment on alternative requirements aimed at continued emission performance improvement after 2029. In Section VIII.B.2.g of this preamble, the EPA proposes flexibility for states to change from mass-based to rate-based goals in different performance periods and, in Section VIII.B.2.h, we solicit comment on planning requirements that match the option of alternative, less stringent state goals.	34904
State Plans	The agency requests comment on a second option in which, in addition to submitting a plan demonstrating emission performance through 2030, states would be required to make a second submittal in 2025 showing whether their plan measures would maintain the final-goal level of emission performance over time. If not, the state submittal would be required to strengthen or add to measures in the state plan to the extent necessary to maintain that level of performance over time.	34905

State Plans	The EPA also requests comment on whether 2025, or an earlier or later year, would be the optimal year for a second plan submittal under the second option.	34905
State Plans	The agency generally requests comment on the appropriate start date and rationale for the plan performance period for the interim goal.	34905
State Plans	The agency invites comment on the proposed approach and other approaches to specifying performance periods for state plans.	34906
State Plans	The EPA requests comment on whether there are other types of state plans that should be considered “self-correcting.”	34907
State Plans	The EPA alternatively requests comment on whether states should be required to create legal authority and/or adopt regulations providing for corrective measures in developing the state plan. The agency requests comment generally on the conditions that should trigger corrective measure requirements.	34907
State Plans	For plans with corrective measures adopted into regulation prior to complete plan submittal, the agency solicits comment on whether actual emission performance inferior to projected performance by ten percent is the appropriate trigger for requiring a state to report the reasons for deficient performance and to implement corrective measures. We are also soliciting comment on the range of five percent to fifteen percent.	34907
State Plans	For plans without corrective measures adopted into regulation prior to complete plan submittal, the agency solicits comment on whether the proposed eight percent emission performance deviation trigger is appropriate. We also solicit comment on the range of five percent to ten percent.	34907
State Plans	The EPA also requests comment on the milestone approach and emission performance checks outlined in the context of the alternative 5-year performance period and the planning approach for alternative state goals.	34907
State Plans	For plans that rely in part on end-use energy efficiency programs and measures, the EPA requests comment on what a state would need to require in its plan to show that performance will be maintained after 2030.	34908
State Plans	The agency requests comment on how the consequences should vary depending on the reasons for a deficiency in performance. Specifically, the agency requests comment on whether consequences should include the triggering of corrective measures in the state plan, or plan revisions to adjust requirements or add new measures.	34908
State Plans	The agency requests comment on whether corrective measures, in addition to ensuring future achievement of the state goal, should be required to achieve additional emission reductions to offset any emission performance deficiency that occurred during a performance period for the interim or final goal.	34908
State Plans	The agency requests comment on the process for invoking requirements for implementation of corrective measures in response to a state plan performance deficiency.	34908
State Plans	The EPA further requests comment on whether the agency should promulgate a mechanism under CAA section 111(d) similar to the SIP call mechanism in CAA section 110.	34908
State Plans	The EPA proposes that a state must maintain the required level of performance and requests comment on the alternative of requiring continued improvement.	34908

State Plans	The EPA is proposing a mechanism for implementing the objective that the level of emission performance for affected EGUs represented by the final goal be maintained in the years after 2030, and the EPA is requesting comment on an alternative approach to a state’s pre-implementation demonstration that the final-goal level of emission performance will be maintained after 2030.	34908
State Plans	The EPA generally requests comment on appropriate requirements to maintain the emission performance of affected EGUs in years after 2030.	34908
State Plans	The EPA also requests comment on whether we should establish BSER-based state emission performance goals for affected EGUs that extend further into the future (e.g., beyond the proposed planning period), and if so, what those levels of improved performance should be.	34908
State Plans	The agency requests comment on the appropriate time period(s) and final year for the EPA’s calculation of state goals that reflect application of the BSER under this approach.	34908
State Plans	The EPA notes that CAA section 111(b)(1)(B) calls for the EPA, at least every eight years, to review and, if appropriate, revise federal standards of performance for new sources. This requirement provides for regular updating of performance standards as technical advances provide technologies that are cleaner or less costly. The agency requests comment on the implications of this concept, if any, for CAA section 111(d).	34908
State Plans	In Section VII, the EPA requests comment on alternative, five-year state emission performance goals for affected EGUs shown in Table 9. The alternative goals represent emission rates achievable on average during the 2020–2024 period, as well as emission rates to be achieved and maintained after 2024. These alternative goals are less stringent than the proposed goals in Table 8. To accompany the alternative goals, the EPA requests comment on another approach for state plan performance periods.	34909
State Plans	In connection with the alternative state goals, for the years after 2027, the EPA requests comment on the same ‘‘out-year’’ issues and concepts for maintaining or improving emission performance over time that are described above in Section VIII.B.2.f. The EPA requests comment on whether a state plan should provide for emission performance after 2025 solely through post-implementation emission checks that do not require a second plan submittal, or whether a state should also be required to make a second submittal prior to 2025 to demonstrate that its programs and measures are sufficient to maintain performance meeting the final goal for at least 10 years. In addition, the agency requests comment on the appropriate date for any second state plan submittal designed to maintain emission performance after the 2025 performance level is achieved.	34909
State Plans	The EPA requests comments on all aspects of these general approvability criteria and the twelve specific plan components described below.	34909
State Plans	We are seeking comment on the appropriateness of existing EPA guidance on enforceability in the context of state plans under CAA section 111(d), considering the types of affected entities that might be included in a state plan.	34909

State Plans	As discussed in section VIII.F.1, the EPA is seeking comment on whether the agency should provide guidance on enforceability considerations related to requirements in a state plan for entities other than affected EGUs (and if so, which types of entities). Also, as discussed in section VIII.F.4, the EPA intends to develop guidance for evaluation, monitoring, and verification (EM&V) of renewable energy and demand-side energy efficiency programs and measures incorporated in state plans.	34909
State Plans	We are seeking comment on whether, for state plans where emission limits applicable to affected EGUs alone would not assure full achievement of the required level of emission performance, the state plan must include additional measures that would apply if any of the other portfolio of measures in the plan are not fully implemented, or if they are, but the plan fails to achieve the required level of emission performance.	34909
State Plans	We request comment on all aspects associated with enforceability of a state plan and how to ensure compliance. We are also seeking comment on enforceability considerations under different state plan approaches, which is addressed in Section VIII.F.1.	34909-34910
State Plans	Existing ISOs and RTOs could provide a structure for achieving efficiencies by coordinating the state plan approaches applied throughout a grid region. In one possible approach, states would implement a multi-state plan and jointly demonstrate CO ₂ emission performance by affected EGUs across the entire ISO/RTO footprint. States with borders that cross the boundary of one or more ISO or RTO footprints would need to include multiple plan components that address affected EGUs in each respective ISO or RTO. The EPA is seeking comment on this idea. States that are outside the footprint of an ISO or RTO may benefit from consulting with other relevant planning authorities when preparing state plans. We are also requesting comment on this idea.	34910
State Plans	We solicit comment on whether the process for implementing corrective measures should include the adoption of new plan measures and subsequent resubmission of the plan to the EPA for review and approval, or whether the process should specify the implementation of measures that are already included in the approved plan in the event that the projected level of performance is not being achieved.	34910
State Plans	We also solicit comment on the point at which such a process and schedule would be triggered, such as at the end of a multi-year plan performance period if emission performance is not met, or at specified interim stages within a multi-year plan performance period.	34910
State Plans	The EPA is requesting comment on the appropriate scope of these reporting requirements and whether the reports should also be directly submitted by the affected entities to the EPA, as well as to the state.	34910-34911
State Plans	We are also seeking comment on two additional options for multi-state plan submittals.	34911
State Plans	The EPA is seeking comment on whether states participating in a multi-state plan should also be given the option of providing a single submittal— signed by authorized officials from each participating state — that addresses common plan elements. Individual participating states would also be required to provide individual submittals that provide state-specific elements of the multi-state plan.	34911
State Plans	The EPA is seeking comment on an approach where all states participating in a multi-state plan separately make individual submittals that address all elements of the multi-state plan.	34911

State Plans	The EPA is seeking comment on two options for calculating a weighted average, rate-based CO ₂ emission performance goal for multiple states.	34911
State Plans	We are requesting comment on whether, to assist states that seek to translate the rate-based goal into a mass-based goal, the EPA should provide a presumptive translation of rate-based goals to mass-based goals for all states, for those who request it, and/or for multi-state regions.	34912
State Plans	The agency is seeking comment on the process for establishing mass-based emission goals, including the options summarized above for the EPA's and states' roles in the translation process.	34912
State Plans	The EPA invites comment on technical considerations involved in translating rate-based goals to mass-based goals.	34912
State Plans	The agency requests comment on the amount of emission rate improvement or emission reduction that the corrective measures included in the plan must be designed to achieve (e.g., measures sufficient to address a 10 percent performance deficiency).	34912
State Plans	The agency also seeks comment on whether the emission guidelines should establish a deadline for implementation of corrective measures (e.g., two years from the July 1 deadline described above for reporting the deficiency as part of the state's annual report on plan performance).	34912
State Plans	We also solicit comment on longer and shorter averaging times for emission standards included in a state plan than those proposed (i.e., for a rate-based emission standard, no longer than 12 months within a plan performance period and, for a mass-based standard, no longer than 3 years).	34913
State Plans	As discussed in Section VIII.C.1, we are seeking comment on the appropriateness of existing EPA guidance on enforceability in the context of state plans under CAA section 111(d), considering the types of affected entities that might be included in a state plan.	34913
State Plans	As discussed in Section VIII.F.1, the EPA is seeking comment on whether the agency should provide guidance on enforceability considerations related to requirements in a state plan for entities other than affected EGUs (and if so, which types of entities).	34913
State Plans	The EPA solicits comment on whether an emission reduction becomes duplicative (and therefore cannot be used for demonstrating performance in a plan) if it is used as part of another state's demonstration of emission performance under its CAA section 111(d) plan.	34913
State Plans	However, we are seeking comment on two possible adjustments to the Part 75 Relative Accuracy Test Audit (RATA) requirements for steam EGU stack gas flow monitors that can affect reported CO ₂ emissions.	34913
State Plans	We solicit comment on whether EGUs producing both electric energy output and useful thermal output should be required to report both electric and useful thermal output.	34914

State Plans	We invite comment on the proposal for reporting of net rather than gross energy output and on the proposed protocols. Specifically, we are seeking comment on: any existing protocols for reporting net output (FERC, NERC, etc.); electricity meter specifications; electricity meter quality assurance testing and reporting procedures; apportionment procedures for parasitic load at multi-unit facilities; treatment of externally provided electricity; and monitoring and quality assurance testing and reporting procedures for non-electric energy output at CHP units.	34914
State Plans	Consistent with the requests for comment in the proposed CAA section 111(b) GHG NSPS regulations for modified and reconstructed sources, we invite comment here on a range of two-thirds to 100 percent credit for useful thermal output in the final rule, or other alternatives to better align incentives with avoided emissions.	34914
State Plans	The EPA is proposing that state plans must include a record retention requirement of ten years, and we request comment on this proposed timeframe.	34914
State Plans	The EPA is requesting comment on the appropriate frequency of reporting of the different proposed reporting elements, considering both the goals of minimizing unnecessary burdens on states and ensuring program effectiveness. In particular, the agency requests comment on whether full reports containing all of the report elements should only be required every two years.	34914
State Plans	The EPA is soliciting comment on whether reports should be submitted electronically, to streamline transmission.	34914
State Plans	The EPA is requesting comment on other circumstances for which an extension of time would be appropriate. We are also seeking comment on whether some justifications for extension should not be permissible.	34915
State Plans	We are requesting comment on the approach for extensions and the timing and frequency of updates that the state must provide.	34915
State Plans	The EPA is soliciting comment on whether there are other elements that a state must include in its initial submittal to qualify for a date extension. Specifically, the EPA requests comment on whether the guidelines should require a state to have taken significant, concrete steps toward adopting a complete plan for the initial plan to be approvable.	34916
State Plans	The EPA is requesting comment on whether, for complete state plans under these guidelines, the agency may use two approval mechanisms provided for in CAA sections 110(k)(3) and (4), 42 U.S.C. 7410(k)(3) and (4). First, where a CAA section 111(d) plan includes severable provisions, some of which are approvable and some of which are not, the EPA is requesting comment on whether the agency should interpret the CAA as providing the flexibility to approve those elements that meet the requirements of this guideline, while disapproving those elements that do not. Second, where a CAA section 111(d) plan is substantially approvable and requires only minor amendments to fully meet the requirements of these guidelines, the EPA is requesting comment on whether the agency should interpret the CAA as providing the flexibility to approve that plan on the condition that the state commits to curing the minor deficiencies within one year.	34916

State Plans	The EPA requests comment on whether, for new projections of emission performance, the projection methods, tools, and assumptions used should match those used for the projection in the original demonstration of plan performance, or should be updated to reflect the latest data and assumptions, such as assumptions for current and future economic conditions and technology cost and performance.	34917
State Plans	The EPA is seeking comment on the creation of a template for initial and complete state plan submittals. A plan template would provide a framework that includes all of the necessary components for an initial and complete submittal that could be populated by states.	34917
State Plans	We are further seeking comment on whether a template may be more appropriate for initial plan submittals than complete plan submittals.	34917
State Plans	The EPA is also seeking comment on whether it should provide for, or require, electronic submittal of initial and complete plans.	34917
State Plans	We are seeking comment on the suitability of an approach such as that being used in the electronic state implementation plan submission (eSIPS) pilot program for submittal of state plans under CAA section 111(d).	34917
State Plans	The agency is seeking comment on the contents of the State Plan Considerations TSD and all aspects of the state plan decision points and factors.	34917
State Plans	We are seeking comment on other appropriate examples of affected entities beyond the affected EGUs.	34917
State Plans	We seek comment on whether the EPA should provide guidance on enforceability considerations related to requirements in a state plan for affected entities other than EGUs (and if so, which such entities).	34917
State Plans	While the EPA is proposing that a state may apply toward its required emission performance level the emission reductions that existing state programs and measures achieve during a plan performance period as a result of actions taken after the date of proposal of these emission guidelines, the EPA also requests comment on the following alternatives: the start date of the initial plan performance period, the date of promulgation of the emission guidelines, the end date of the base period for the EPA's BSER-based goals analysis (e.g., the beginning of 2013 for blocks 1-3 and beginning of 2017 for block 4, end-use energy efficiency), the end of 2005, or another date. We are seeking comment on the point in time after which such actions should be able to qualify for use during a plan performance period, considering the method used to set state goals.	34918
State Plans	The EPA requests comment on whether there is a rational basis for choosing a date that predates the base period from which the EPA used historical data to derive state goals. The agency generally requests comment on the appropriate date to select under this option.	34918
State Plans	The EPA also solicits comment on a second broad option. This option would recognize emission reductions that existing state requirements, programs and measures achieved starting from a specified date prior to the initial plan performance period, as well as emission reductions achieved during a plan performance period.	34918-34919
State Plans	The EPA requests comment on this option – that emission reduction effects that occur prior to the beginning of the initial plan performance period could be applied toward meeting the required level of emission performance in a state plan.	34919

State Plans	The agency requests comment on whether pre-2020 implementation of new requirements would be practical for states. The agency generally requests comment on this approach, including the conditions that should apply to pre-2020 emission reductions that would count toward the state goal.	34919
State Plans	The agency also requests comment on the alternative dates listed above in connection with this option. We also request comment on whether this option is inconsistent with the forward-looking method that the EPA has proposed for establishing state goals based on the application of the BSER.	34919
State Plans	The agency is seeking comment on whether some variation of this approach could be justified as consistent with the EPA's proposed goal-setting approach, as well as the general concept of the BSER and its application in establishing state goals.	34919
State Plans	We are seeking comment on whether the emission effects of actions that are taken after proposal or promulgation of the emission guidelines or the approval of a state plan, but which occur prior to the beginning of the initial state plan performance period, could be applied toward meeting the required level of emission performance in a state plan.	34919
State Plans	We are seeking comment on different approaches for providing crediting or administrative adjustment of EGU CO ₂ emission rates, which are elaborated further in the State Plan Considerations TSD.	34919
State Plans	We invite comment on each of these possible approaches.	34920
State Plans	Because some of the CO ₂ emissions avoided through RE and demand-side EE measures may be from non-affected EGUs, we are seeking comment on how this might be addressed in a state plan, whether when adjusting or crediting CO ₂ emission rates of affected EGUs based on the effects of RE and demand-side EE measures or otherwise.	34920
State Plans	We are seeking comment on the suitability of these approaches in the context of an approvable state plan, and on whether harmonization of state approaches, or supplemental actions and procedures, should be required in an approvable state plan. In particular, we intend to establish guidance for acceptable quantification, monitoring, and verification of RE and demand-side EE measures for an approvable EM&V plan, and are seeking comment on critical features of such guidance, including scope, applicability, and minimum criteria. We are also seeking comment on the appropriate basis for and technical resources used to establish such guidance, including consideration of existing state and utility protocols, as well as existing international, national, and regional consensus standards or protocols.	34921
State Plans	The EPA is requesting comment on the merits of this approach, including whether such guidance should identify types of RE and demand-side EE measures and programs for which evaluation of results is relatively straightforward and which are appropriate for inclusion in a state plan.	34921
State Plans	As an alternative to the EPA's proposed approach of allowing a broad range of RE and demand-side EE measures and programs to be included in state plans, provided that supporting EM&V documentation meets applicable minimum requirements, the EPA is requesting comment on whether guidance should limit consideration to certain well-established programs, such as those characterized in Section V.A.4.2.1 of the State Plan Considerations TSD.	34921
State Plans	We are seeking comment on the examples and suitability of potential approaches described in the State Plan Considerations TSD and any other appropriate reporting and recordkeeping requirements for affected entities beyond affected EGUs.	34921

State Plans	The EPA is seeking comment on the options for treatment of interstate effects summarized below, as well as alternatives.	34921
State Plans	We also request comment on whether a state should be able to take credit for emission reductions out of state due to in-state EE measures if the state can demonstrate that the reductions will not be double counted when the relevant states report on their achieved plan performance, and what such a demonstration should entail.	34922
State Plans	We request comment on these and other approaches for taking into account CO ₂ emission reductions from demand-side EE measures in state plans.	34922
State Plans	The EPA is also seeking comment on how to avoid double counting emission reductions using the proposed approach for accounting for CO ₂ emission reductions from renewable energy measures implemented by the state.	34922
State Plans	We also request comment on the option of allowing a state to take into account only those CO ₂ emission reductions occurring in its state.	34922
State Plans	We also request comment on whether a state should be able to take credit for emission reductions out of state due to renewable energy measures if the state can demonstrate that the reductions will not be double counted when the relevant states report on their achieved plan performance, and on what such a demonstration should entail.	34922
State Plans	We request comment on these and other approaches for taking into account CO ₂ emission reductions from renewable energy measures.	34922
States Plans	We are seeking comment on the considerations discussed in the Projecting EGU CO ₂ Emission Performance in State Plans TSD, including options presented for how projections might be conducted in an approvable state plan, and how different types of state plan approaches are represented in these projections.	34923
State Plans	We are seeking further comment on whether the EPA should develop guidance that describes acceptable projection approaches, tools, and methods for use in an approvable plan, as well as providing technical resources for conducting projections.	34923
State Plans	The agency solicits comment on whether certain other measures not used to set state goals are appropriate to include in a state plan to achieve CO ₂ emission reductions from affected EGUs. In addition to the specific requests for comment related to specific technologies identified, we also request comment on other measures that would be appropriate. In addition, we request comment on whether the EPA should provide specific guidance on inclusion of these measures in a state plan.	34923
State Plans	The agency requests comment on alternative nuclear capacity baselines, including whether the date for recognizing additional non-BSER nuclear capacity should be the end of the base year used in the BSER analysis of potential nuclear capacity (i.e., 2012).	34923
State Plans	This proposal does not include new NGCC as a component of the BSER, but the agency requests comment on that in Section VI of this preamble.	34923

State Plans	The agency requests comment on how emission changes under a rate-based plan resulting from substitution of generation by new NGCC for generation by affected EGUs should be calculated toward a required emission performance level for affected EGUs.	34924
State Plans	With respect to new fossil fuel-fired EGUs, the agency also requests comment on the concept of providing credit toward a state's required CAA section 111(d) performance level for emission performance at new CAA section 111(b) affected units that, through application of CCS, is superior to the proposed standards of performance for new EGUs.	34924
State Plans	We invite comment on whether incremental emission reductions from new fossil fuel-fired boilers and IGCC units with CCS, based on exceeding the CAA section 111(b) performance standards for such units, should be allowed as a compliance option to help meet the emission performance level required under a CAA section 111(d) state plan.	34924
State Plans	We invite comment on whether incremental emission reductions from new NGCC units that outperform the performance standards for such units under CAA section 111(b) based on the use of CCS should be allowed as a compliance option to help meet the emission performance level required under a CAA section 111(d) state plan.	34924
State Plans	The agency requests comment on whether industrial combined heat and power (CHP) approaches warrant consideration as a potential way to avoid affected EGU emissions, and whether the answer depends on circumstances that depend on the type of CHP in question.	34924
State Plans	The EPA requests comment on whether there are still other areas beyond those discussed above for which it would be useful for the EPA to provide guidance.	34924
State Plans	The agency is requesting comment on its analysis of the implications of the EPA's existing regulations interpreting "useful life" and "other factors" for purposes of this rulemaking. The agency also requests comment on whether it would be desirable to include in regulatory text any aspects of this preamble discussion about how the provisions in the existing implementing regulations concerning source-specific factors relate to this emission guideline.	34925
State Plans	To the extent that a performance standard that a state may wish to adopt for affected EGUs raises facility-specific issues, the state is free to make adjustments to a particular facility's requirements on facility-specific grounds, so long as any such adjustments are reflected (along with any necessary compensating emission reductions), as part of the state's CAA section 111(d) plan submission. The agency requests comment on its interpretation.	34925- 34926
State Plans	The EPA proposes that the remaining useful life of affected EGUs, and the other facility-specific factors identified in the existing implementing regulations, should not be considered as a basis for adjusting a state emission performance goal or for relieving a state of its obligation to develop and submit an approvable plan that achieves that goal on time. The agency solicits comment on this position.	34926
State Plans	The EPA solicits comment on the approach for providing decision support resources and the information currently included, and planned for inclusion, in the Decision Support Toolbox.	34928

Implications for Other EPA Programs	We request comment on whether, with adequate record support, the state plan could include a provision, based on underlying analysis, stating that an affected source that complies with its applicable standard would be treated as not increasing its emissions, and if so, whether such a provision would mean that, as a matter of law, the source's actions to comply with its standard would not subject the source to NSR. We also seek comment on the level of analysis that would be required to support a state's determination that sources will not trigger NSR when complying with the standards of performance included in the state's CAA section 111(d) plan and the type of plan requirements, if any, that would need to be included in the state's plan.	34928-34929
Small Businesses	We invite comments on all aspects of the proposal and its impacts, including potential impacts on small entities.	34947
Federalism	In the spirit of Executive Order 13132, and consistent with the EPA's policy to promote communications between the EPA and state and local governments, the EPA specifically solicits comment on this proposed action from State and local officials.	34948
Tribal	We specifically solicit comment from tribal officials on this proposed rule.	34948
National Technology Transfer and Advancement	This proposed rulemaking does not involve voluntary consensus standards – technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The EPA welcomes comments on this aspect of the proposed rulemaking and specifically invites the public to identify potentially-applicable VCS and to explain why such standards should be used in this action.	34949
Environmental Justice	The public is invited to submit comments or identify peer-reviewed studies and data that assess effects of exposure to the pollutants addressed by this proposal.	34950