I. INTRODUCTION

On February 22, 2013, the United States Environmental Protection Agency (“EPA”) published in the Federal Register a proposed rule that would make findings of substantial inadequacy and require revisions to the startup, shutdown, and malfunction (“SSM”) provisions of 36 state implementation plans (“SIPs”). 78 Fed. Reg. 12460 (Feb. 22, 2013) (“Proposal” or “Proposed SSM Rule”). The Proposed SSM Rule represents EPA’s response to a petition for rulemaking filed by the Sierra Club on June 30, 2011, which asserted that SIP SSM provisions in 39 states are inconsistent with the requirements of the Clean Air Act (the “Act” or “CAA”). EPA’s Proposed SSM Rule would grant that petition in part and deny it in part, resulting in a “SIP Call” that would require various SIP revisions across 36 states.

The Class of ‘85 Regulatory Response Group (“Class of ‘85” or “Group”) respectfully submits these comments on the Proposal.1 The Class of ‘85 is a voluntary ad hoc coalition of approximately 30 electric generating companies from around the country that has been actively involved in the development of regulations implementing the CAA. Members of the Class of ‘85 own and operate sources in states subject to the Proposal and would be directly affected by any final rule promulgated by EPA.

II. SUMMARY OF COMMENTS

The Proposal states that “EPA is proposing to revise its SSM Policy with respect to affirmative defenses for violations due to excess emissions that occur during startup and shutdown, in order to distinguish between planned events that are within the source’s control and unplanned events that are not.” 78 Fed. Reg. at 12465. The Proposal represents a sharp departure from 30 years of EPA policy and EPA’s practice of approving—and even promulgating through federal implementation plans (“FIPs”)—startup and shutdown exemptions and defenses, as well as various forms of malfunction provisions and defenses. EPA claims that this change in policy is based on the concept that startups and shutdowns are planned events, with predictable outcomes. But these statements ignore EPA’s prior recognition of the difficulty of controlling emissions during startup/shutdown periods and the unpredictable nature of certain

1 Attached is a list of the Class of ‘85 members who support these comments.
startup and shutdown events. EPA’s proposal to implement its new policy through a broad SIP Call is not sufficiently supported in terms of substantive impacts and is not legally justified.

EPA proposes to require two major changes to affected SIPs: (i) certain states would be required to replace existing malfunction or upset provisions with a new affirmative defense for periods of malfunction; and (ii) certain states would be required to eliminate from SIPs and permits existing exemptions from emissions limitations during periods of startup and shutdown. In addition to requiring revisions to 36 SIPs, a lengthy and onerous process itself, these two changes may require modifications to thousands of operating permits, requiring in turn thousands of accompanying operational and technological changes at affected sources. The Group is concerned that EPA’s proposed SSM Rule is based on inaccurate assumptions, is overly burdensome, creates needless enforcement uncertainty, and is legally unsound.

First, the Proposal ignores the practical realities of startup and shutdown periods, during which sources may not be able to operate the controls required to meet emissions limitations for technological reasons. EPA also assumes that all startups and shutdowns are “planned” events. However, many electric generating units (“EGUs”) face rapid-start requirements to provide peaking power or to support renewable generation. Similarly, EGUs may come offline unexpectedly for operational or safety reasons, and must then re-start. These types of startups and shutdowns are not “planned” in any sense, and are not part of “normal operations.” EPA’s assumption that sources can control emissions in the same manner as “normal” operating periods during these startup and shutdown periods is fundamentally flawed. EPA should reconsider its approach to startup and shutdown periods to provide protections against enforcement that account for practical realities and operational requirements. At a minimum, EPA should clarify that states retain their current authority to implement source-specific non-numerical emissions limitations or control measures (such as work-practice standards) during periods of startup and shutdown.

Second, although EPA’s decision to allow an affirmative defense for malfunction events correctly recognizes that such events are beyond the source’s control, EPA’s proposed malfunction criteria would create significant enforcement uncertainty if adopted into SIPs or any FIP that EPA may issue. The Proposal outlines an affirmative defense for malfunction periods that includes 10 specific criteria, each one containing numerous terms of art, such as “sudden,” “foreseen,” and “root cause analysis.” See 78 Fed. Reg. at 12479. EPA fails to define these terms or provide any guidance as to their meaning. By requiring satisfaction of 10 vague and undefined criteria to qualify for a malfunction defense, EPA would invite litigation over the meaning, definition and implementation of those criteria. Sources have little guidance on how to document and defend EPA’s proposed malfunction criteria, and may face differing requirements in each state as courts are forced to interpret and define the scope and meaning of a “malfunction.” EPA should (i) simplify the malfunction criteria; (ii) provide clear malfunction documentation requirements; (iii) create a burden-shifting system for reporting malfunctions; and (iv) allow states to craft their own malfunction defenses that do not incorporate EPA’s specific criteria.

Third, the Proposal infringes on state authority to implement national ambient air quality standards (“NAAQS”). States are given primary responsibility for implementing the NAAQS. Unless EPA can identify flaws making each individual SIP “substantially inadequate,” EPA
lacks authority to promulgate the Proposal’s SIP Calls. EPA has failed to identify any connection between existing SSM provisions and NAAQS attainment problems, and has failed to provide any other valid basis for its blanket revision of 36 SIPs. In fact, several of the states facing a SIP Call under the Proposal have no nonattainment areas, indicating that their SIPs are in fact “adequate” to attain the NAAQS. And while the Proposal ostensibly is based on EPA’s prior SSM policy positions and its “longstanding interpretation of the CAA,” 78 Fed. Reg. at 12468, none of EPA’s prior SSM memoranda addressed elimination of startup and shutdown provisions; rather EPA’s prior policy memoranda expressed approval for exemptions during startup/shutdown periods. Lacking any substantive basis for the Proposal, EPA relies almost exclusively on a flawed interpretation of the term “emissions limitation” that is not supported by the CAA and that conflicts with over 30 years of EPA precedent. These flaws call into question EPA’s legal authority to promulgate the SSM Rule, which in its current form is arbitrary, capricious, and contrary to the CAA.

III. COMMENTS ON THE PROPOSED SSM RULE

As explained more fully in Section IV below, the Class of ‘85 believes that EPA’s Proposal is not legally justified and should be rescinded in its entirety. However, to the extent that EPA proceeds with its effort to revise its SSM Policy and issue a SIP Call, the Group has a number of concerns regarding implementation of the Proposal that are based on the practical aspects of controlling emissions during periods of startup, shutdown, and malfunction at EGUs and other steam generating sources. And while the Group supports inclusion of a defense for malfunction periods, EPA’s proposed criteria are vague, redundant, and will create enforcement uncertainty and unnecessary litigation. The Group is providing suggestions in these comments that could be included in a final SIP Call to help ensure that the final action does not impose unintended consequences and burdens on sources and regulators, and that recognizes the technical and administrative practicalities of operation during startup, shutdown and malfunction periods. The Class of ‘85 appreciates EPA’s consideration of these comments.

A. EPA’s Proposal Is Based on an Incorrect Characterization of Operations During Startup and Shutdown.

The Class of ‘85 opposes EPA’s proposal to treat startup and shutdown periods as part of “normal source operation,” and to require removal of any SIP provisions that provide exemptions or affirmative defenses for excess emissions occurring during periods of startup and shutdown. EPA’s proposed characterization of all startup and shutdown activities as “planned” phases of normal source operation during which “sources should be expected to comply with applicable emissions limitations” is fundamentally incorrect for EGUs and many other steam generation sources operated by Group members. See 78 Fed. Reg. at 12480. Many commonly used air pollution control devices (“APCDs”) are subject to technical, operational and safety constraints that effectively prevent their use or optimization during startup and shutdown. These limitations must be recognized and taken into account in regulatory and permitting provisions. EPA should continue its historic practice of authorizing states to implement provisions that allow for protection against enforcement for excess emissions as a result of these technical infeasibility issues. Such provisions are necessary as a practical matter and are not inconsistent with the CAA.
1. **Startup and shutdown periods cannot be treated as “normal operation” for purposes of compliance with emissions limits.**

   EPA’s premise for changing its policy regarding startup and shutdown periods is that such periods are planned events for which source operators should be able to meet emissions limits applicable during “normal operation” through appropriate design, maintenance and operation. This approach fails to recognize inherent limitations in the design and safe operation of many types of control equipment that preclude the use of such equipment to meet emissions limitations established for normal operations during startup and shutdown periods. It also directly conflicts with EPA’s acknowledgement in the Proposal that many control equipment devices used to comply with SIP emission limits cannot be used or do not reach optimal control levels until stable temperature thresholds are met, and premature operation raises concerns regarding worker safety and equipment damage in unstable operating environments.

   For example, certain controls on EGUs can be started or optimized only after the flue gas reaches a certain temperature. Group members report that low nitrogen oxide (“NOx”) burners and selective catalytic reduction (“SCR”)—two common pollution control technologies—cannot reach their design control levels during startup and shutdown periods. Low NOx burners have multiple stages for controlling fuel and air. During startup and at all other times of low fuel flows or loads, not all stages are in service because flame stability must be balanced against reduction of NOx and carbon monoxide emissions. While it can take as little as 20 minutes for a simple cycle combustion turbine to reach loads at which low NOx burners can optimize combustion, combined cycle units can take two to six hours, or even longer. This is because steam temperature must be increased very gradually in combined cycle units to avoid thermal metal stress on steam turbine components.

   SCRs also are employed on many combined cycle units and coal-fired units as an additional post-combustion NOx control method. SCR reduces NOx in the exhaust gases by converting it to nitrogen via a reduction reaction with ammonia injected into the flue gas in the presence of a catalyst substrate. The catalyst requires a specific temperature range to effectively catalyze the reaction and reduce emissions. The minimum effective temperature cannot be achieved during unit startup (especially “cold” startups after outages). As a result, the use of SCR technology to reduce NOx emissions is impossible during startup and other low load operations. Selective non-catalytic reduction (“SNCR”), dry scrubbers and limestone injection technologies face similar constraints and cannot be operated at low temperatures.


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**2** Injection of ammonia during startup would only result in unreacted ammonia being released to the atmosphere with little or no NOx reduction.

**3** EPA expressly recognized these inherent design limitations in its recent proposal regarding the MATS rule. See Memorandum from William Maxwell, EPA (ESG/SPPD/OAQPS), to EPA Docket # EPA-HQ-OAR-2009-0234, Re: Startup and shutdown provisions (Nov. 16, 2012) (“We are also aware that SNCR and SCR systems with ammonia injection need to be operated within a prescribed and relatively narrow temperature window to provide nitrogen oxide (NOx) reductions and that dry scrubbers also need to be operated close to flue gas saturation temperature.”) (hereinafter “Maxwell Memorandum”).
Operation of other controls during startup and shutdown can compromise the safety of operators and the integrity of equipment. For example, certain EGUs cannot start electrostatic precipitators (“ESPs”) prior to combusting coal. Starting these systems at one Group member’s facilities would contradict the manufacturer specifications for the equipment. The operating manual for the ESP at one plant requires the allowance of sufficient time for flue gases passing through the precipitator chambers to preheat the internals to ensure the precipitator operates above dew point. Operation at or below dew point might cause a crusted coating to form on the collecting electrodes that would impede proper operation. The ESP also requires a two-to-one coal-to-oil burn ratio to minimize the risk of explosion due to sparking in an energized field. Additionally, years of operating experience at this EGU has shown that energizing the fields too soon in the startup process leads to an oil-fired coating on the curtains that inhibits the collection efficiency of the precipitators and, as a result, causes derates during startups due to high opacity.

ESPs also are affected by other site-specific concerns, like local weather conditions. For example, the humid environment in Florida causes condensation to accumulate on the interior of the precipitator at one Group member’s EGU. If the plant were to energize the elements in the precipitator while that moisture was present, it would arc over to ground in various locations. This causes damage that renders portions of the precipitator inoperable, making it impossible to collect ash at the usual high efficiency when the unit is brought online. To avoid this problem, the plant follows procedures based on the manufacturer’s recommendations and the plant’s experience, which require it to maintain flue gas temperatures above 200°F for two hours. This heats the cold steel inside the precipitators and evaporates the water. Then, when the plant energizes the elements, there are no short circuits. Once energized, the precipitator is capable of removing fly ash from the flue gas stream.

Scrubbers also are affected by weather conditions. Cold temperatures impact the timing for opening scrubber towers. For example, one Group member must use hot flue gas to warm the 800,000 gallons of cold lime slurry for several hours before allowing the flue gas to pass through the scrubber towers. If they were to allow the flue gas to pass through the scrubber towers instead of a by-pass before the slurry reached the necessary temperature, the cold, moist gas exiting the module would turn the stack into a wet stack. Because the stack was not designed for wet gas, the moisture in the stack would increase the likelihood of corrosion of the stack lining.

Fabric filter baghouses are similarly impacted by flue gas temperature and, as a result, certain designs cannot be operated until startup is complete. One Group member owns a coal-fired EGU that operates a baghouse for particulate control during periods of normal operation. The flue gas must reach a certain minimum temperature before the baghouse is put into service to prevent acid corrosion from damaging the baghouse and resulting in its failure. This minimum temperature cannot be reached until the first megawatt is produced, meaning that the baghouse cannot be put into service until that time. This is because the facility starts up on natural gas, but lacks sufficient natural gas capacity for the unit to complete the startup process. Due to this limitation, coal must be fired about 30 minutes into the startup process but before
startup is complete. This allows the flue gas to reach the necessary temperature for the operation of the baghouse.

These scenarios represent only some of the many examples of the different design and operational issues that affect control availability and effectiveness at individual sources during startup and shutdown periods. They illustrate that, contrary to EPA’s premise, there are real technological constraints that simply do not allow sources to avoid excess emissions during startup and shutdown periods, even with careful and prudent planning. By proposing a regulatory structure that provides no relief for excess emissions resulting from technical infeasibility, EPA is ignoring reality and setting sources up for unavoidable non-compliance and the risk of enforcement actions. Companies should not have to choose between safety and civil penalties during startup and shutdown. Accordingly, the Class of ‘85 urges EPA to rescind its SIP Call with respect to SIP provisions that protect sources against enforcement and civil penalties during startup and shutdown periods when it is technologically infeasible to operate control devices safely, effectively, and without damaging the equipment.

2. EPA has not provided a valid basis for treating unplanned startup and shutdown periods differently than periods of malfunction.

The Class of ‘85 agrees with EPA’s decision to preserve in its SSM Policy the validity of an affirmative defense for malfunction events. However, EPA has not provided a valid basis for failing to extend the same affirmative defense to startup and shutdown periods. EPA acknowledges in the Proposal that “the SSM Policy should differentiate between unplanned and planned events.” 78 Fed. Reg. at 12469. Under the same criteria EPA applied to make that determination for malfunction events, EPA also should authorize an affirmative defense for excess emissions that occur during unplanned startup and shutdown events.

EPA has retained the malfunction affirmative defense because malfunction events occur for reasons outside the control of the operator. Unplanned startup and shutdown events are just as unplanned and unpredictable as malfunctions and should be subject to the same legal defenses. For example, unexpected EGU startups may be required to meet demand, peaking,

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4 ESPs are started when the switch to coal is made. The ESP is shut off when flue gas is up to proper baghouse operating temperatures that are above the acid dew point and the baghouse is started.

5 Another Group member experiences excess emission events due to safety procedures for unit shutdown. When coal units are shut down for extended periods of time, the plant continues to run the pulverizer systems to clean out the coal. This prevents fires and explosions, which have occurred at other facilities.

6 EPA took exactly this approach in its recent approval of Texas SIP provisions that provide an affirmative defense for excess emissions during unplanned startup and shutdown events. See Approval and Promulgation of Implementation Plans; Texas; Excess Emissions During Startup, Shutdown, Maintenance, and Malfunction Activities, 75 Fed. Reg. 68989 (Nov. 10, 2010). EPA’s action on the Texas SIP has been upheld by the U.S. Court of Appeals for the Fifth Circuit. Luminant Generation Co. LLC v. EPA, No. 10-60934, 2013 WL 1195649 (5th Cir. Mar. 25, 2013).
dispatch, or other requirements. Startups also can vary greatly depending on fuel, operational conditions, ambient temperature, and other site-specific factors. Because units are inherently less stable during startup periods, these factors have a significant effect on unit operation and can result in highly variable emissions, depending on conditions. Similarly, shutdowns are not always planned or predictable and may occur due to a unit “trip,” for safety reasons, or to correct an operational issue or conduct an urgent repair. Unplanned shutdowns and startups also may occur due to a malfunction. All of these events “are entirely beyond the control of the owner or operator” and “despite diligent efforts by sources . . . emission standards may be violated under limited circumstances beyond the control of the source.” 78 Fed. Reg. at 12469-70.

Finally, applying an exemption/affirmative defense to unplanned startup and shutdown events satisfies EPA’s criteria for ensuring that an affirmative defense provision is consistent with the CAA. Since unplanned startup and shutdown events are practicably indistinguishable from malfunctions, an exception/affirmative defense covering startup and shutdown periods would: (1) still be narrowly drawn to address only those excess emissions that are unavoidable; (2) not interfere with the requirement that the emission limitations apply continuously (i.e., will not provide relief from injunctive relief); and (3) not interfere with the overarching requirements of the CAA, such as attaining and maintaining the NAAQS. See 78 Fed. Reg. at 12470.

The Group encourages EPA to take a consistent approach to unplanned and unpredictable events by allowing SIPs to include affirmative defenses for both malfunctions and unplanned startup and shutdown events.

3. EPA should clarify that states will retain authority to apply special emission limitations, control measures or techniques during startup and shutdown.

If EPA finalizes its Proposal to require elimination of exemptions or affirmative defenses for periods of startup and shutdown, EPA should confirm that, for sources relying on emissions controls that cannot be operated safely during startup and shutdown, states have authority under the CAA to “allow special emission limitations or other control measures or control techniques that are designed to minimize excess emissions during startup and shutdown.” 78 Fed. Reg. at 12478. States should retain broad authority to craft source-specific startup and shutdown provisions, including work practice standards in lieu of numeric emissions limits, in their SIPs and source permits. EPA also should clarify that compliance with those startup and shutdown provisions would mean that any emissions during that period could not be considered “excess” or

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7 For example, one Group member tests the safety trip and interlocks for its steam turbine systems during shut down; this sometimes causes the unit to trip offline.

8 EPA itself has long recognized the connection between malfunctions and periods of startup and shutdown, noting that if excess emissions “occur during routine startup or shutdown periods due to a malfunction, then those instances should be treated as malfunctions.” 78 Fed. Reg. at 12471 (quoting Memorandum from Steven A. Herman, Assistant EPA Administrator for Enforcement and Compliance Assurance, to Regional Administrators (Sept. 20, 1999) (hereinafter “1999 SSM Guidance”)).
result in a violation. 78 Fed. Reg. at 12471 (“If sources in fact cannot meet the otherwise applicable emission limitations during planned events such as startup and shutdown, then an air agency can develop specific alternative requirements that apply during such periods, so long as they meet other applicable CAA requirements.”).

EPA should confirm that numeric emissions limits during startup and shutdown are not required, and that work practice and other forms of flexible emissions standards are acceptable. CAA Section 302(k) expressly recognizes the validity as an “emission limitation” of “any design, equipment, work practice or operational standard promulgated under [the CAA].” EPA has acknowledged in recent rulemakings the technical infeasibility of meeting numerical emissions limits during startup and shutdown. For example, the final EGU Mercury and Air Toxics Standards (“MATS”) rule contains work practice standards instead of numeric emissions limitations. See 77 Fed Reg. 9304 (Feb. 16, 2012). In authorizing such standards, EPA recognized the limited availability of data regarding emissions during startup and shutdown due to difficulties in obtaining accurate measurements with current technologies during such periods. In addition, many affected states have imposed time constraints on the duration of excess emissions during SSM events. Such constraints are a means of limiting the quantity of excess emissions during such events consistent with Section 302(k).9

Limitations like these already are incorporated into operating permits and illustrate the feasibility of this approach. For example, one Group member’s natural gas-fired combined cycle units are required to limit startup and shutdown operating time to a designated number of hours per year. The Group member’s coal-fired boilers are subject to specific work practices designed to minimize the number of startups, such as staffing experienced individuals during startups to help prevent faulty starts and analyzing coal to ensure that poor fuel quality will not cause a forced outage. Another Group member’s operating permit specifies that excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed a designated number of hours in a 24-hour period. All operators and supervisors are required to receive training that will include good operating practices as well as methods for minimizing excess emissions. Finally, certain controls at Group members’ units are required to operate only when technologically feasible. For example, operation of a certain SCR is not required during startup, but shall be initiated prior to the SCR inlet duct gas temperature reaching 600 degrees Fahrenheit. During shutdown, the control equipment must continue to operate as long as it is effective. Similarly, ammonia injection at another unit must begin as soon as operation of the gas turbine achieves the operating parameters specified by the manufacturer.

EPA also should confirm that compliance with such work practice standards would preclude any claims regarding “excess emissions” during the relevant startup and shutdown period. In light of the broad variety of APCDs and technological limitations of the operation of such devices (even among Group members), as described above in Section III.A.1, states should

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9 Similar limits have been used by EPA in other contexts for startup emissions. See, e.g., 40 C.F.R. Part 63, Subpart ZZZZ (imposing 30-minute limit on startup period in context of the National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (“RICE NESHAP”).
retain broad authority to craft startup and shutdown provisions that incorporate source-specific operating constraints.10

B. EPA’s Proposed Malfunction Criteria Should Be Revised.

The Class of ‘85 supports EPA’s decision to reject Sierra Club’s request to vacate guidance related to affirmative defense provisions for malfunction events. See 78 Fed. Reg. at 12469. EPA’s longstanding SSM policy has properly recognized that excess emissions occurring as the result of a malfunction are entirely beyond the control of the owner and operator. However, the Group believes that the proposed malfunction defense, which (if finalized) is likely to be adopted into SIPs and possibly incorporated into FIPs, is inadequate to protect sources from claims related to excess emissions resulting from malfunctions. The proposed defense is overly complex and employs numerous vague and undefined terms, which would create significant enforcement uncertainty and potentially result in disparate standards across jurisdictions. The Group also is concerned that the proposed malfunction defense will foster disputes over the meaning of each individual malfunction criteria, exposing sources (and potentially EPA) to unnecessary and wasteful litigation. To address these issues, the Group asks EPA to adopt a simplified version of its proposed malfunction criteria and create a burden-shifting scheme that would provide more certainty to regulatory agencies and sources while reducing unnecessary litigation.

The Proposed SSM Rule would require states to replace certain existing SIP provisions establishing a defense or exemption for excess emissions with an “affirmative defense” for periods of malfunction.11 EPA defines a malfunction as a “sudden and unavoidable breakdown of process or control equipment.” 78 Fed. Reg. at 12463. For states subject to a SIP Call related to a malfunction defense or similar provision, EPA is “recommending” that states adopt regulatory language currently used under Section 112 when establishing new NESHAPs. The NESHAP regulatory language provides that:

To establish the affirmative defense in any action to enforce such a standard, the owner or operator must . . . prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

10 As a practical matter, by April 2015, most EGUs will be complying with specific work practice standards pursuant to the EGU MATS. While states should be allowed to use alternative standards for purposes of startup and shutdown SIP provisions, EPA should recognize that compliance by EGUs with the MATS work practice standards would be sufficient to preclude any claims of “excess emissions” during startup and shutdown periods.

11 The defense would protect sources from civil penalties, but not from injunctive relief or attorney’s fees.
(ii) Could not have been prevented through careful planning, proper design, or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

78 Fed. Reg. at 12479. In addition to these criteria, the Proposal would require a written report to the appropriate regulatory authority. The report would be required to demonstrate satisfaction of all malfunction criteria and include “all necessary supporting documentation.” Id.

The Group supports the concept of an affirmative defense for periods of malfunction. Even well-maintained, properly operated equipment can fail or break down, potentially causing excess emissions. In these situations, the Group agrees with EPA that it does not make sense to impose monetary penalties on a source. The Group also believes that inclusion of affirmative
defenses and other similar provisions furthers EPA and CAA goals of reducing emissions in a manner that minimizes burdens on affected sources. However, the Group believes that the malfunction defense proposed by EPA is inadequate to truly protect sources from claims related to excess emissions resulting from malfunctions.

1. The Proposal’s malfunction criteria are redundant, vague and undefined.

EPA’s recommended malfunction definition includes nine specific criteria or requirements (one of which contains four subparts), each of which contains numerous undefined and vague terms, and many of which are redundant. If adopted into SIPs or FIPs, these criteria undoubtedly would be the subject of extensive litigation, resulting in uncertainty for sources that are trying to categorize events in accordance with the rule. Definitions imposed through litigation also may result in different standards across states and circuits, such that two identical sources face significantly different requirements.

The four subparts of the first proposed requirement all relate to the cause of a given malfunction, effectively further defining the term “malfunction.” To qualify for a malfunction defense under EPA’s proposed language, a malfunction must be “sudden, infrequent, and unavoidable,” and also must be an event that “could not have been prevented.” But the second phrase is redundant—any “unavoidable” event by definition “could not have been prevented.” Similarly, requiring that the event “did not stem from any activity or event that could have been foreseen and avoided, or planned” is akin to the “unavoidable” requirement. And “inadequate design, operation, or maintenance” also are “avoidable” issues in an ordinary sense of the word, and therefore redundant with “unavoidable.” Rather than simply requiring an event to be “unavoidable” to qualify for a malfunction defense, EPA has set up a redundant four-part definition, each of which contains numerous undefined terms itself. Because application of each of these terms is necessarily fact-specific, EPA’s proposed definition would inject needless uncertainty into the process of determining which events constitute malfunctions. The wording also would encourage litigation over each term, and until courts define the scope of words like “inadequate design” or “foreseen and avoided,” sources would have little certainty about how to categorize and report malfunction events. Instead of this vague, redundant, and burdensome four-part test, EPA should simply reference the definition of malfunction: a “sudden and unavoidable breakdown of process or control equipment.”

The remaining eight criteria similarly use vague or undefined terms. Although EPA’s proposed malfunction requirements are written as if they establish objective criteria (such as “all possible steps,” “all of the actions” and “at all times”), these provisions necessarily require consideration of their meaning in the context of a fact-specific malfunction. If a source’s operations are consistent with practices appropriate for that unit, it should not be precluded from using a malfunction defense by application of standards that require “all possible steps.” EPA should clarify that these provisions incorporate an element of reasonableness based on operations consistent with manufacturer’s specifications and recommendations, safety considerations, and accepted industry practice.

Absent such clarification, the proposed criteria would require sources to make difficult decisions about addressing malfunction issues. In hindsight, it is sometimes possible to identify
a way to improve operations or processes to avoid or minimize a certain type of malfunction. EPA’s definition creates a perverse incentive for sources to avoid identifying these remedial measures, for fear that in a later enforcement action a plaintiff may use such measures as evidence that “all” steps were not taken at the time of the malfunction. EPA should avoid such absolutes and craft requirements that make sense in the context of the real-world responses to malfunctions, while encouraging sources to engage in self-critical analysis after-the-fact.

Similar defects plague EPA’s last criterion, the requirement for a “root cause” analysis. Group members conduct analyses, on a formal or informal basis, to identify and address the cause of malfunctions. But standards and practices vary widely and are tailored to the needs of a specific facility and the severity or complexity of a given event. For example, the readily identified mechanical failure of a fan may be quickly identified and resolved. But an internal wiring or software problem related to the control system for that fan may be much harder to identify and address. In the first instance, a “root cause” analysis may simply consist of a work order to repair or replace the fan while, in the second instance, a full vendor-supported investigation may be necessary. By failing to define or provide any real standards for what constitutes a “root cause” analysis, EPA is inviting litigation over the adequacy of a source’s follow-up to each and every malfunction. While Group members strive to minimize malfunctions, they do occur. Forcing sources to interpret each term, apply that interpretation, and then defend their interpretation would inject needless guesswork and uncertainty into the regulatory reporting and enforcement process.

Finally, malfunction requirements related to environmental impacts have no relevance to the determination of whether an event constitutes a malfunction. As EPA has repeatedly explained in guidance and the Proposal, a malfunction defense is justified based on whether that event was within the control of the owner or operator of the source. This is a causation-based inquiry, and not a results-based inquiry. Nonetheless, EPA proposes to include criteria that specifically focus on environmental impacts resulting from a malfunction. Requirement number five would require that “[a]ll possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health.” This effects or results-based inquiry is entirely irrelevant to the process of determining whether a particular event was caused by a “sudden and unavoidable breakdown of process or control equipment.” EPA should eliminate this requirement because it is irrelevant to assessing the cause of a malfunction. Other criteria include requirements to operate “in a manner consistent with good practices for minimizing emissions” and to operate control systems “consistent with safety and good air pollution control practices.” EPA should eliminate or revise these criteria to focus on the cause of a malfunction, not the end result.

2. Enforcement discretion will not compensate for the uncertainty created by the proposed malfunction criteria.

The uncertainty created by EPA’s proposed malfunction criteria would encourage litigation by potentially forcing every source to “prove up” all malfunctions in court. EPA asserts that states and EPA can exercise enforcement discretion for malfunctions, but this is little comfort to sources facing a potential raft of citizen suits. Class of ’85 members report that citizen groups are aggressive in bringing lawsuits for excess emissions caused by malfunctions, even when those malfunctions are documented and reported to state regulators. This forces...
sources to defend each malfunction in court, despite any enforcement discretion exercised by EPA or state regulators. Regardless of the validity of a citizen plaintiff’s claims, sources must expend significant time and resources to defend these claims. Often, the litigation process distracts key environmental personnel from other important tasks, such as working to assure compliance with emissions limitations and permit conditions. This burden, combined with the potential for a million-dollar litigation bill, places sources in an untenable position. In some cases, the litigation costs may be higher than the potential penalties at stake, entirely subverting the purpose of the affirmative defense for malfunctions. EPA’s 13-step malfunction inquiry further complicates this picture by injecting more uncertainty and points of dispute into the process. Given the potential for costly citizen suit litigation surrounding each malfunction, State and EPA enforcement discretion does nothing to alleviate this problem.

3. EPA should adopt a simpler malfunction defense to eliminate redundancies and reduce unnecessary litigation.

The Group recommends that EPA retain an affirmative defense for periods of malfunction but take steps to improve the defense, reduce uncertainty, and reduce wasteful litigation. First, the Group asks EPA to take a hard look at its proposed malfunction criteria and eliminate vague, absolute, and redundant terms. In particular, the Group recommends the following changes to each of the nine numbered malfunction requirements:

- Replace the first requirement (and all four subparts) with a simple definition of “malfunction” already adopted by EPA.
- Eliminate the second requirement. Sources already have a significant incentive to make expeditious repairs so that they can return to operation. Moreover, the requirement to use “off-shift and overtime labor” is inappropriate since this type of work is often unwarranted or unnecessary and because it places an undue burden on sources. If EPA does keep this requirement, EPA should eliminate the overtime element and re-phrase the requirement as “Repairs were made as expeditiously as reasonably possible.”
- Eliminate the third requirement. This requirement is irrelevant to the cause of a malfunction. Evaluating the environmental impact resulting from a malfunction has no bearing on whether a given event was within the control of the source. Moreover, sources already have significant incentive to minimize the duration of any excess emissions to minimize any potential penalties. It usually is not immediately clear whether an event is caused by a malfunction, and sources typically treat all excess emissions events seriously, with prompt action to minimize and address the issue. If EPA does retain this requirement, EPA should re-phrase it as “The frequency, amount and duration of the violation (including any bypass) were minimized to the extent reasonably practicable.”
- Eliminate the fourth requirement as redundant. The definition of a malfunction already requires a malfunction to be “unavoidable.” Imposing additional criteria is unnecessary and creates significant uncertainty, since it is hypothetical or
speculative as to whether the avoided events (loss of life, etc.) would have come to pass in the absence of the bypass.

- Eliminate the fifth requirement regarding bypasses as irrelevant to the cause of a malfunction. Evaluating the environmental impact resulting from a malfunction has no bearing on whether a given event was within the control of the source. If this requirement is not eliminated, EPA should re-phrase it as “All reasonably possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health.”

- Eliminate the sixth requirement as irrelevant to the cause of a malfunction. Evaluating the environmental performance during a malfunction, especially with respect to other systems, has no bearing on whether a given event was within the control of the source. If this requirement is not eliminated, EPA should re-phrase it as “All emissions monitoring and control systems were kept in operation if at all reasonably possible, consistent with safety and good air pollution control practices.”

- Re-phrase the seventh requirement as “Actions in response to the violation were documented by operating logs or other comparable records.” This change would provide needed flexibility to sources using electronic recordkeeping or other types of records that are not in a traditional “logbook” format.

- Eliminate the eighth requirement, as it appears to pertain to time periods that are not relevant to the malfunction itself. If this requirement is retained it should be re-phrased as “[a]t all times during the malfunction, the affected source was operated in a manner consistent with good practices for minimizing emissions, to the extent reasonably possible.”

- Eliminate the ninth requirement. Reporting requirements already require documentation of a malfunction event, and a “root cause” analysis is not appropriate or necessary in the context of every malfunction. This requirement also is partially redundant with requirement number 7. If EPA does retain this requirement, it should (i) provide further guidance on the scope of the required analysis; (ii) allow the scope and form of any “root cause” analysis to vary with the needs of the particular source, control equipment, and type of malfunction; and (iii) eliminate the emissions estimation requirement, since it is not always possible to estimate emissions, and because the result of the malfunction has nothing to do with its cause.

Even if EPA does not change its proposed criteria, EPA should clarify that states retain discretion in how they define and apply the malfunction criteria in their revised SIPs. State agencies have substantial experience with individual sources and accepted engineering practices; they should be allowed to establish criteria that fit their own regulated sources and serve the purposes of the malfunction defense, even if those criteria are not identical to EPA’s recommended language.
4. **EPA should establish a presumptive burden-shifting scheme for malfunctions to reduce enforcement uncertainty.**

In addition to making changes to the malfunction qualifying criteria as recommended above, EPA should adopt a burden-shifting scheme for reporting malfunctions. In the Proposal, EPA reiterates its position that “a valid affirmative defense provision must provide that the defendant has the burden of proof to demonstrate all of the elements of the defense to qualify. This demonstration has to occur in a judicial or administrative proceeding where the merits of the affirmative defense are independently and objectively evaluated.” 78 Fed. Reg. at 12478. While the Group agrees with EPA that an affirmative defense places the initial burden on a source to demonstrate the existence of that defense, the Group is very concerned about the burden of doing so in the context of litigation related to every malfunction event. As explained above, litigation costs and burdens may subvert the purpose of the affirmative defense, and reliance on enforcement discretion does not mitigate this problem in the face of “shotgun” style citizen enforcement actions.

Rather than imposing a litigation burden on sources, EPA should impose a regulatory reporting burden that, if met, would presumptively establish the malfunction defense and shift the burden from sources to a potential plaintiff. Within this structure, a source would document and report malfunctions (to the appropriate regulatory authority) in accordance with state or EPA requirements. In addition to a malfunction reporting form, sources would submit a summary of supporting details relevant to each malfunction requirement. Unless rejected by the regulatory authority within a certain time period (such as 30 days) as inadequate, the source’s reporting would presumptively establish the existence of the malfunction defense.

This burden-shifting reporting structure would not alter or undermine EPA, state, or citizen enforcement. Instead, such a system would enhance both source certainty and enforcement proceedings by providing regulators with the facts forming the basis of the malfunction event, allowing and encouraging early evaluation of the malfunction. Moreover, any excess emissions would remain subject to an enforcement action, except that the source’s initial reporting would presumptively establish the malfunction defense, subject to challenge by EPA, state regulators, or citizens. The criteria and system proposed by EPA would incentivize “shotgun” style claims by citizen groups related to all reported malfunction events, regardless of the merits of individual events. By contrast, a reporting and burden-shifting scheme, such as the one outlined above, would help to reduce enforcement uncertainty while allowing enforcement actions to focus on malfunctions where there is a real dispute as to the merits of specific malfunction criteria.

**C. EPA’s Proposal Will Create Enormous Administrative Burdens That Outweigh Any Potential Environmental Benefit.**

As explained above in Section III.A.1, the elimination of protections for emissions during startup and shutdown events will have little practical effect on how sources operate during those periods because of limitations on control equipment operation and efficiency. Therefore, as a practical matter, the environmental benefits of EPA’s Proposal as it relates to EGUs are not significant. Yet the Proposal would place a tremendous — and unwarranted — burden on permitting agencies, sources, EPA, and the courts.
The Group appreciates EPA’s clarification that it does not intend the issuance of the SIP Call to affect the application of the current SIPs or to have “automatic impacts on the terms of any existing permit” 78 Fed. Reg. at 12482. To further clarify the mechanics of the process, the Group requests that EPA confirm that any operating permit amendments necessitated by SIP revisions may be implemented through the regular permitting cycle, and that neither the Proposal nor any related SIP revision will require the re-opening of existing permits for immediate amendment. The Group also agrees with EPA’s suggestion that states should be allowed the full 18-month period to implement any necessary revisions to their SIPs. See 78 Fed. Reg. at 12467.

Although EPA’s statements should minimize immediate impacts, eventual revision of the affected SIPs would significantly impact permitting. The revision of permits, even during the regular Title V permit renewal process, would require significant state and EPA resources during the permit review process. Since the revised SIP provisions would impact thousands of sources, state permitting agencies and EPA would be presented with hundreds of permit revisions every year. For example, new SIP provisions may require sources to re-evaluate startup/shutdown procedures, which in turn may affect permit emissions limits and averaging times. All of this would need to be reflected in the revised operating permit.

The revision of Title V permits also would trigger public notice and comment periods on proposed permits, which could lead to unnecessary litigation if permits are challenged. If EPA does not object to proposed permit revisions, environmental groups may petition EPA to object. It can take EPA years to respond to these petitions, leaving sources with significant uncertainty with respect to their permit renewals. See EPA Title V Petition Database.12 If EPA were to deny petitions to object, environmental groups could file suit in federal court, further delaying the issuance of revised permits.

For these reasons, the Group requests that EPA clarify that any permit amendments be implemented through the regular permitting cycle. This approach would spread out permit amendments, reducing impacts on sources, states, and EPA alike with little or no practical impact on the ultimate implementation of new SSM requirements. The Group also asks EPA to thoroughly the significant impacts these amendments would have on sources, on states, and on EPA itself, and consider whether those impacts are justified given the lack of any demonstrated link between the Proposal and air quality.

IV. COMMENTS ON THE LEGAL BASIS FOR THE PROPOSED SSM RULE

Notwithstanding the suggestions made above, the Class of ‘85 believes that the legal basis for the Proposal is fatally flawed, and that the Proposal should be rescinded. The following comments respond to EPA’s request for feedback on its memorandum providing the statutory, regulatory, and policy background for the Proposed SSM Rule. See 78 Fed. Reg. at 12468 (citing Memorandum to Docket EPA-HQ-OAR-2012-0322, Re Statutory, Regulatory, and Policy Context for this Rulemaking, EPA-HQ-OAR-2013-0322-0029 (Feb. 4, 2013) (hereinafter “Legal Basis Memo”)). These comments also address the legal flaws underlying EPA’s proposed action.

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A. EPA Lacks Statutory Authority For The Proposed SIP Call.

1. The proposed SIP Call infringes on state authority to implement the NAAQS.

The CAA is an experiment in cooperative federalism. The Act requires EPA to establish NAAQS for certain air pollutants to protect public health and welfare, 42 U.S.C. §§ 7408, 7409, but reserves to the states the “primary responsibility” for implementation of a NAAQS. 42 U.S.C. § 7407(a); Train v. Natural Res. Def Council, Inc., 421 U.S. 60, 86-87 (1975). Within this structure, EPA “determines the ends—the standards of air quality—while the states are given the initiative and broad responsibility to determine the means to achieve those ends.” Concerned Citizens of Bridesburg v. EPA, 836 F.2d 777, 779 (3d Cir. 1987) (citing Bethlehem Steel Corp. v. Gorsuch, 742 F.2d 1028, 1036 (7th Cir. 1984)). This division of authority means that EPA is “plainly . . . relegated by the Act to a secondary role in the process of determining and enforcing the specific, source-by-source emission limitations.” Train, 421 U.S. at 79; see also Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2539 (2011) (“The [CAA] envisions extensive cooperation between federal and state authorities, generally permitting each State to take the first cut at determining how best to achieve EPA emissions standards within its domain”) (internal citations omitted). EPA expressly recognizes and recites these principles in the Legal Basis Memo:

The Act gives the Agency no authority to question the wisdom of a State’s choices of emission limitations if they are part of a plan which satisfies the standards of §110(a)(2). . . .Thus, so long as the ultimate effect of a State’s choice of emission limitations is compliance with the national standards for ambient air, the State is at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation.

Legal Basis Memo at 2 (citing Train, 421 U.S. at 79).

The above statement confirms that EPA’s oversight role in the SIP process is limited. As the Eleventh Circuit recently held, EPA has no “inherent authority” to reconsider past SIP actions because the CAA contains express mechanisms dictating when and how EPA can call for SIP revisions. Alabama Environmental Council v. EPA, 711 F.3d 1277, 1291 (11th Cir. 2013) (“the Clean Air Act’s express statutory provisions for revising and correcting a SIP preclude the EPA’s reliance on any claim of inherent authority”). As the court affirmed, “so long as the ultimate effect of a State’s choice of emission limitations is [in] compliance with the national standards for ambient air, the State is at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation. . . . The great flexibility accorded the states under the Clean Air Act is . . . illustrated by the sharply contrasting, narrow role to be played by the EPA.” Id. at 1280 (internal quotations and citations omitted).

The statutory procedures are clear and straightforward. If a SIP submission meets the requirements of Section 110(a)(2), EPA must approve it within one year. Id.; 42 U.S.C. § 7410(k)(2). EPA may call for SIP revisions only after EPA finds that an existing SIP is “substantially inadequate,” and must allow the state to correct the inadequacy before EPA takes action. Id. § 7410(k)(5). Similarly, EPA may issue a FIP only after a state has failed to submit a
SIP or after the state has submitted a SIP but EPA has found it inadequate. *Id.* § 7410(c)(1). Rather than adhering to the narrow oversight role as prescribed by the CAA and limiting its involvement to circumstances where it can demonstrate that SIP provisions are substantially inadequate, EPA now proposes SIP revisions based on its own *policy preferences*. This policy-driven approach is not a valid application of EPA’s SIP Call authority.

EPA has framed its SSM Proposal as addressing a concern with SIP provisions that EPA suggests are inadequate to assure attainment of the NAAQS or PSD increments within a given state:

An important feature of the 1999 SSM Guidance relevant to action on the Petition is the emphasis that the EPA put on recommending against the creation of SIP provisions that would provide an affirmative defense in the case of emission limitations applicable to “a source or small group of sources that has the potential to cause an exceedance of the NAAQS or PSD increments.”

Legal Basis Memo at 12 (quoting 1999 SSM Guidance). But EPA then extrapolates that narrow concern about actual exceedances or impacts by “a source or small group of sources” into a sweeping and unsupported assumption that *all* malfunction and startup/shutdown provisions in SIPs threaten to create such impacts. Rather than linking the proposed SIP Call to “a source or small group of sources” that has the potential to cause an exceedance of the NAAQS or PSD increments,13 EPA seeks to impose its SSM policy wholesale on the states. EPA’s SIP Call authority under Section 110(k)(5) is narrow, and is intended to remedy situations where a SIP is “substantially inadequate” to meet CAA requirements. The Proposal goes well beyond that purpose by injecting EPA’s policy preference into the SIP design process that Congress entrusted to the states.

Courts have confirmed that EPA policy positions cannot alter the effectiveness of previously approved SIP provisions. *See* *Alabama Environmental Council* at 1286-92 (requiring adherence to CAA SIP Call and revision procedures and rejecting EPA’s attempt to reverse a prior SIP approval based on a shift in policy preference); *US Magnesium, LLC v. EPA*, 690 F.3d 1157, 1168-70 (10th Cir. 2012) (affirming that EPA may rely on past SSM policy when promulgating rules, but that policy itself does not alter the effectiveness of previously approved SIP provisions); *Sierra Club v. Georgia Power Co.*, 443 F.3d 1346, 1354 (11th Cir. 2006) (affirming validity of emissions exemption during “upset” periods). Courts also have affirmed the existence of a CAA “federalism bar” that prohibits EPA from injecting policy preferences into the SIP design process. *See* *Michigan v. EPA*, 213 F. 3d 663, 687 (D.C. Cir. 2000) (holding that because states retain primacy for NAAQS implementation, EPA action is invalid if it triggers a “federalism bar” by mandating “impermissible source-specific means rather than a permissible end goal”); *Virginia v. EPA*, 108 F.3d 1397, 1410 (D.C. Cir. 1997), modified on other grounds, 116 F.3d 499 (D.C. Cir. 1997) (discussing EPA authority to require SIP revisions through a SIP Call and holding that “Congress did not give EPA authority to choose the control measures or mix of measures states would put in their implementation plans.”). The Proposal’s

13 For example, EPA could have conducted monitoring or air quality modeling to show actual NAAQS violations resulting from SSM provisions in particular states, or with respect to certain sources.
SIP Calls violate these tenets by imposing EPA’s SSM policy preference on the states, thereby usurping state authority to “adopt whatever mix of emission limitations it deems best suited to its particular situation.” *Alabama Environmental Council*, 711 F.3d at 1280 (quoting *Train*, 421 U.S. at 79).

2. **EPA has failed to define or provide a clear standard for determining whether a SIP is “substantially inadequate.”**

Before EPA can issue a SIP Call under Section 110, EPA must determine that a SIP is “substantially inadequate to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the interstate pollutant transport described in section 7506a of this title or section 7511c of this title, or to otherwise comply with any requirement of this chapter.” 42 U.S.C. § 7410(k)(5). But nowhere in the Proposal does EPA define or interpret “substantially inadequate,” or provide any standards for assessing the adequacy of a SIP with respect to SSM provisions.\(^{14}\)

The term “substantially inadequate” is the lynchpin requirement for any SIP Call issued by EPA. Before issuing a SIP Call, EPA must first determine that a SIP is “substantially inadequate” within the meaning of Section 110(k)(5). By using the word “substantially,” Congress raised the bar for EPA action. The word “substantial” is a term used to enhance the degree of proof necessary for action. *See The Am. Heritage Dictionary of the English Language*, 1284 (1981) (defining “substantial” as “[c]onsiderable in importance, value, degree, amount, or extent”); *Webster’s Third New International Dictionary of the English Language*, 2280 (2002) (defining “substantial” as “considerable in amount, value, or worth,” and “being that is specified to a large degree or in the main”). Congress deliberately chose to employ a “substantial inadequacy” standard, and EPA must give meaning to that term.

In other sections of the CAA, Congress has granted EPA broader discretion to take regulatory action, using terms like “in his judgment,” “discretion,” and “may be appropriate” to indicate when EPA action is allowable under the Act. But in Section 110, Congress intended that states retain primary authority for crafting SIP provisions, and allowed EPA to step in only in narrow, limited circumstances. Congress’s use of “substantial” seems to recognize that SIPs may be imperfect, mutable documents that serve as a testing ground for a wide range of policy mechanisms aimed at improving air quality and implementing CAA requirements. But the lack of perfect alignment between a state policy and EPA’s policy preference is not enough to render the SIP inadequate. Instead, Congress required “substantial” inadequacy, such that a SIP is demonstrably inadequate to attain or maintain the NAAQS or fully implement a CAA “requirement.” The Proposal ignores this important structural aspect of the CAA, and EPA’s failure to provide any objective standards by which a SIP may be determined “substantially inadequate” with respect to SSM provisions renders the Proposal arbitrary, capricious, and not in accordance with the plain language of the CAA.

\(^{14}\) In other recent rulemakings, EPA has recognized the need to define “substantial inadequacy” when issuing a SIP Call. *See, e.g.*, 75 Fed. Reg. 77698, 77705 (Dec. 13, 2010) (defining “substantial inadequacy” in the context of SIP provisions relating to prevention of significant deterioration permitting for greenhouse gas emissions).
3. EPA has not made an adequate demonstration that the relevant SIPs are “substantially inadequate.”

Before EPA can issue a SIP Call, the CAA requires EPA to either show how a SIP provision is “substantially inadequate” with respect to NAAQS attainment or interstate pollution or show how a SIP provision is “substantially inadequate” to comply with another CAA “requirement.” 42 U.S.C. § 7410(k)(5). The Proposal fails to meet this standard for issuance of a SIP Call. When EPA acts under the “requirement” prong of Section 110(k)(5), it must demonstrate a “substantial” inadequacy with a firm CAA requirement. Here, EPA’s reliance on the “requirement” of 302(k) is misplaced, because the definition of “emission limitation” is not a true CAA “requirement” and because EPA’s interpretation of that definition is incorrect and contrary to Congressional intent. In the absence of any true inadequacy with respect to a CAA requirement, EPA must show how a SIP provision interferes with NAAQS attainment. But EPA has not shown how any SSM provision at issue renders a SIP “substantially inadequate” to attain or maintain the NAAQS. EPA has provided no technical or scientific data linking the SSM provisions at issue to NAAQS attainment. In fact, several states that would be subject to a SIP Call under the Proposal have no nonattainment areas, underscoring EPA’s focus on policy preferences at the expense of real air quality improvements. By failing to satisfy the SIP Call prerequisites of Section 110(k)(5), the Proposal is contrary to the CAA and is arbitrary and capricious.

(i) CAA Section 302(k) does not authorize the proposed SIP Call.

Under 42 U.S.C. § 7410(k)(5), only a SIP that is “substantially inadequate . . . to otherwise comply with any requirement” of the CAA can justify a SIP Call. 42 U.S.C. § 7410(k)(5). However, EPA has incorrectly concluded that the affected SIPs are “substantially inadequate” to comply with CAA Section 302(k). Section 302(k) defines the term “emission limitation,” which does not constitute a “requirement” under Section 110(k)(5). But even if the definition of “emission limitation” constitutes a “requirement,” EPA’s interpretation is incorrect and its reliance on that definition is misplaced.

The Act defines “emission limitation” as:

[A] requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this chapter.

42 U.S.C. § 7602(k) (emphasis added). EPA asserts that any “emission limitation” must be “continuous” under this definition. As a result, EPA reasons, emissions exemptions during SSM periods are contrary to the CAA because emissions limitations must apply “continuously.” See Legal Basis Memo at 7. But EPA’s interpretation is not supported by the plain language or the legislative history of Section 302(k). If Congress intended to impose a “continuous emissions limitation,” it would have said so. Conn. Nat’l Bank v. Germain, 503 U.S. 249, 254 (1992) (Congress “says in a statute what it means and means in a statute what it says there.”). Instead,
Congress used the term “continuous basis”\textsuperscript{15} to distinguish between previously employed dispersion techniques (such as intermittent control) and actual limitations on the “quantity, rate, or concentration of emissions.” The second half of this definition specifically encompasses “any design, equipment, work practice or operational standard.” \textit{Id.} These types of standards do not impose specific numeric emissions limitations on any sort of “continuous basis” but instead depend on a variety of techniques used to reduce emissions, rather than to disperse emissions.\textsuperscript{16} This language, combined with the full legislative history, plainly indicates that Congress did not intend the language “continuous basis” to mean “continuous emissions limitation” in the literal sense now asserted by EPA.

In support of its application and definition of “emission limitation,” EPA relies heavily on legislative history from 1977, which states in part that:

By defining the terms “emission limitation,” “emission standard,” and “standard of performance,” the committee has made clear that constant or continuous means of reducing emissions must be used to meet these requirements. By the same token, intermittent or supplemental controls or other temporary, periodic, or limited systems of control would not be permitted as a final means of compliance.

Legal Basis Memo at 4 (quoting H.R. Rep. 95-294, at 92 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1170). EPA ignores the fact that this statement was made in the context of Congressional concern with \textit{intermittent controls and dispersion of air pollution}. Congress declared in the sentence immediately preceding the statement quoted by EPA:

The committee proposal is intended to ratify the general thrust, if not the specific holdings, of the three U.S. courts of appeals which have considered the issue of

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\textsuperscript{15} The Group further believes that statutory construction principles may limit the “continuous basis” language to requirements limiting the “concentration of emissions.” Under the “last antecedent” rule, “a limiting clause or phrase . . . should ordinarily be read as modifying only the noun or phrase that it immediately follows.” \textit{U.S. v. Hayes}, 555 U.S. 415, 425 (2009) (quoting \textit{Barnhart v. Thomas}, 540 U.S. 20, 26 (2003)). Under this rule, “continuous basis” can modify only concentration-based emissions limitations, and has no effect on limits that are based on the quantity or rate of emissions. \textit{See} 42 U.S.C. § 7602(k). While the last antecedent rule is not absolute, EPA has not provided any other “indicia of meaning” to overcome this presumptive rule of interpretation.

\textsuperscript{16} EPA’s past policy and actions also indicate that the definition of “emissions limitation” does not require each SIP to contain literally “continuous” emissions limitations. For example, and as explained above, EPA has approved numerous SIPs with startup and shutdown exemptions, and even recently promulgated FIPs with such exemptions. EPA also approved SIP provisions containing “once per hour” or other periodic exemptions to emissions requirements. These prior actions and interpretations directly contradict the position taken by EPA in the Proposal. Moreover, as explained above, EPA has recently addressed this issue in the context of the MATS rule, specifically recognizing that SIPs and permits may contain work practice standards rather than continuous numeric limits.
the permissibility of use of intermittent controls, tall stacks, and other dispersion enhancement techniques.

H.R. Rep. 95-294, at 91-92 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1170 (citing NRDC v. EPA, 489 F.2d 390 (5th Cir. 1974)); Big Rivers Electric Corp. v. EPA, 523 F.2d 16 (6th Cir. 1975); Kennecott Copper Corp. v. EPA, 526 F.2d 1149 (9th Cir. 1975), cert. denied in each case). And earlier in the legislative history, Congress confirmed that:

Continuous Controls.-- The amendments would also affirm the decisions of four U.S. court of appeals cases that the act requires continuous emission reduction measures to be applied. Thus, intermittent control measures (to be applied only in case of adverse weather conditions), increasing stack heights, or other pollution dispersion techniques would not be permitted as final compliance strategies.

The intended purpose of this amendment is to insure the use of control measures which (1) would be reliable and enforceable; (2) would reduce overall pollution exposures to regulated pollutants (and to uncontrolled derivative pollutants, such as sulfates); (3) prevent spreading the pollution to presently clean areas; (4) leave more air resources for the growth of new industry and jobs.


By adding a definition for “emission limitation,” and using the words “continuous basis” in that definition, Congress distinguished between techniques used to disperse emissions and efforts to control those emissions. In doing so, Congress rejected the adequacy of “intermittent control measures,” a form of dispersion.17 As Congress again explained:

Intermittent controls and other dispersion enhancement techniques are techniques which seek to reduce concentrations of pollutants not by reducing the amounts of pollutants emitted into the air, but rather by relying on the dispersion of pollutants throughout the: atmosphere. Thus, pollutants are dispersed away from high-concentration areas and toward lower concentration areas.

When meteorological conditions favor dispersion of air pollutants from heavily impacted areas to cleaner areas, greater emissions would be permitted. When meteorologic conditions adversely affect dispersion, emissions from the affected source would be temporarily reduced or deferred, although in some cases emissions elsewhere might be increased. An example of the latter situation is load switching from one powerplant where dispersion is poor to another where dispersion is more favorable. Tall stacks are used to elevate the releases of emissions so that they will be dispersed more widely before reaching ground level and thus will result in lower ambient concentrations at ground level near the source. Both intermittent controls and tall stacks are referred to as dispersion

17 The CAA section governing stack heights expressly defines “dispersion techniques” as “any intermittent or supplemental control of air pollutants varying with atmospheric conditions.” 42 U.S.C. § 7423(b) (emphasis added).
dependent or enhancement techniques, although there are other dispersion dependent techniques than these two.


When the full legislative history is considered, it becomes clear that Congress wanted to define “emissions limitation” in a way that prevented the use of dispersion as a form of emissions control or limitation. Importantly, Congress never rejected the idea of limited exceptions to the operation of pollution control devices (such as during periods of technical infeasibility during startup or shutdown). Rather, Congress was concerned with a total absence of control devices.

In the Proposal and the Legal Basis Memo, EPA misreads both the CAA and this legislative history to conclude that the Act requires “continuous emission limitations.” See Legal Basis Memo at 4. But Congress never intended, and the CAA does not require, that SIPs contain “continuous emissions limitations” in the literal form asserted by EPA. And there can be no “substantial inadequacy” under Section 110(k)(5) for a requirement that does not exist. As a result, EPA lacks CAA authority to finalize the Proposal and issue the SIP Calls based on EPA’s application of Section 302(k).

(ii) **EPA has not determined that the SIPs are substantially inadequate to attain or maintain the NAAQS.**

Failing to demonstrate a “substantial inadequacy” with respect to a CAA “requirement,” EPA must demonstrate “substantial inadequacy” with respect to attainment or maintenance of the NAAQS. 42 U.S.C. § 7410(k)(5). In other words, to satisfy Section 7410(k)(5), EPA must justify its SIP Call with real data demonstrating a SIP failure. To satisfy this requirement, EPA must draw at least some correlation between the SIP provision at issue and a real air quality problem. Otherwise, the Congressional mandate for “substantial inadequacy” would be undermined and rendered meaningless, and EPA would impermissibly bypass state primacy for NAAQS implementation.

Recent cases cited in EPA’s Legal Basis Memo do not hold otherwise. In *Montana Sulphur & Chemical Co. v. EPA*, 666 F.3d 1174 (9th Cir. 2012), the Ninth Circuit upheld a SIP Call in part because “EPA expressly addressed” relevant monitoring data and conducted air quality modeling to evaluate the emissions at issue. *Montana Sulphur*, 666 F.3d at 1184-85. The court reasoned that because this information indicated “plausible reasons for concern” about attainment of the relevant SO2 NAAQS, the SIP Call at issue was justified. Id. at 1185. EPA has

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18 EPA misses the point when it says it “does not believe that it is authorized to issue a SIP Call to rectify an impermissible automatic exemption provision only after a violation of the NAAQS has occurred, or only if that NAAQS violation can be directly linked to the excess emissions that resulted from the impermissible automatic exemption by a particular source on a particular day.” 78 Fed. Reg. at 12484. The Group does not argue that EPA needs to link a SIP Call to an actual NAAQS violation that occurred in the past; rather, the Group points out that EPA has a statutory obligation to find a SIP “substantially inadequate” to attain or maintain the NAAQS in the present.
conducted no similar analysis in support of the Proposal. And in *US Magnesium*, the plaintiffs argued that EPA must “set out facts showing that the [Unavoidable Breakdown Rule] has prevented Utah from attaining or maintaining the NAAQS or otherwise complying with the CAA.” *US Magnesium*, 690 F.3d at 1167 (emphasis added). However, the court in that case was not concerned with the first method of finding “substantial inadequacy,” which relates to attainment or maintenance of the NAAQS, but instead focused on EPA’s interpretation of a “requirement” under Section 10(k)(5). Because the court was addressing the second avenue for issuance of a SIP Call—substantial inadequacy with respect to a CAA “requirement”—*US Magnesium* did not address statutory requirements that apply when EPA issues a SIP Call based on the first avenue available under Section 110(k)(5), which requires substantial inadequacy with respect to NAAQS attainment.

When relying on NAAQS attainment as the basis for a SIP Call, the CAA requires EPA to show how a particular SIP provision is interfering with NAAQS attainment, or has a substantial likelihood of doing so in the future. Despite this statutory requirement, the Proposal includes no emissions data, air quality monitoring data, modeling results, peer reviewed studies, or any other science or “hard” information that draws a correlation (much less demonstrates a causal relationship) between state SSM provisions and actual air quality issues. In fact, several states that would be subject to a SIP Call have no nonattainment areas. These states include Maine, North Dakota, and South Dakota. These SIPs are demonstrably adequate to assure NAAQS attainment. EPA plainly lacks authority for the proposed SIP Call for these states under any reasonable interpretation of Section 110(k)(5).

EPA’s lack of Section 110(k)(5) authority renders the Proposal arbitrary and capricious. The Proposal is based entirely on a flawed interpretation of a CAA definition and lacks any grounding in real air quality impacts. By failing to draw a link between state SSM provisions and air quality issues, the Proposal represents nothing more than an arbitrary and capricious policy position with respect to SSM periods.

States retain primacy for NAAQS implementation, not EPA. As EPA has explained, “so long as the ultimate effect of a state’s choice of emission limitations is compliance with the national standards for ambient air, the State is at liberty to adopt whatever mix of emission limitations it deems best suited to its particular situation.” Legal Basis Memo at 2, citing *Train*, 421 U.S. at 79. In the absence of any demonstrated link to air quality issues rendering a SIP substantially inadequate, any effort by EPA to impose its policy preference on the states is beyond EPA’s authority under Section 110(k)(5), making the Proposal arbitrary and capricious.

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19 As explained below, *US Magnesium* does not support EPA’s interpretation of the definition of “emission limitation” in Section 302(k)(5) because the plaintiff in that case did not directly challenge EPA’s underlying interpretation of that provision.

20 To assess state-level NAAQS compliance, the Group is relying on EPA’s “Green Book Nonattainment Areas for Criteria Pollutants” data as of December 14, 2012 (the latest information available). This data is available at: http://www.epa.gov/oaqps001/greenbk/index.html, with a map of nonattainment areas available at: http://www.epa.gov/oaqps001/greenbk/mapnpoll.html.
4. Recent court decisions do not support EPA authority to issue the SIP Call.

EPA claims that “[r]ecent court decisions have emphasized the significance of the explicit requirement for emission limitations that apply on a ‘continuous’ basis as a plain reading of the CAA.” Legal Basis Memo at 4. For this proposition, EPA cites the decisions in Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008) and US Magnesium, 690 F.3d 1157. Neither of these cases reaches the sweeping conclusion that EPA suggests.

The first case, Sierra Club, dealt with SSM requirements under Section 112, which addresses hazardous air pollutants. In rejecting blanket exemptions from Section 112 requirements during SSM periods, the Sierra Club court correctly noted that the addition of the “emission limitation” definition to the CAA was intended “to exclude intermittent control technologies from the definition of emission limitations” Sierra Club, 551 F.3d at 1027 (citing Kamp v. Hernandez, 752 F.2d 1444, 1452 (9th Cir. 1985)). To reach this conclusion, the Sierra Club court relied almost exclusively on the 1985 Kamp decision. Kamp dealt with dispersion techniques, Kamp, 752 F.2d at 1451-52, and affirmed EPA’s approval of an Arizona emissions rule based on “multi-point methodology” that specifically allowed—and even expected—a certain number of annual exceedances of the applicable emission limit. Id. at 1448-49. Interpreting the use of “emissions limitations” under CAA Section 110(a)(2)(B) and the corresponding definition under Section 302(k), Kamp specifically held that “[w]e cannot say that EPA’s definition of ‘continuous’ is unreasonable. In the first place, the requirement of regulation on a continuous basis does not necessarily imply that the source always be subject to precisely the same limitation.” Id. at 1452. In other words, the exemptions and variable emissions limits approved by EPA represented a reasonable interpretation of Section 302(k). The Kamp court continued:

Equally important, EPA’s definition is supported by the legislative history. Congress’s primary purpose behind requiring regulation on a continuous basis was to exclude intermittent control techniques from the definition of emission limitations. The House Report states:

“By defining the term ‘emission limitation,’ . . . the committee has made clear that constant or continuous means of reducing emissions must be used .... By the same token, intermittent or supplemental controls or other temporary, periodic, or limited systems of control would not be permitted . . .”

EPA’s definition of “continuous” accommodates the legislative history by giving “continuous” an essentially negative definition: any control technique is continuous which does not operate on an intermittent basis.

Kamp, 752 F.2d at 1452-53 (quoting H.R. Rep. No. 294, 95th Cong. 1st Sess. 92 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1170) (internal citation omitted) (emphasis added). As explained above, “intermittent” in this context means dispersion techniques. What Congress intended, what EPA previously asserted, and what Kamp confirms is that any non-dispersion control technique is “continuous” as that term was used by Congress in Section 302(k). While Section 302(k) confers a “requirement of regulation on a continuous basis,” that requirement
clearly encompasses variable emissions rates and expected (and permissible) periodic exceedances of those rates that EPA approved and Kamp affirmed. Kamp, 752 F.2d at 1452-53 (emphasis added). The “continuous basis” language of Section 302(k) does not, and was never intended to, impose a “continuous emissions limitation” as EPA now assumes, and Sierra Club reached no such holding.\footnote{To the extent that the Sierra Club court held that Congress intended the definition of “emission limitation” in Section 302(k)(5) to require application of emission limitations on a literal continuous basis, that holding is based on an incorrect interpretation of Kamp, lacks any precedent, contradicts the plain language of the CAA, is contrary to Congressional intent, and should be reversed.}

Moreover, the Sierra Club decision was directly dependent on the structure of Section 112 and cannot be extended to the entirely different regulatory structure that governs SIPs under Section 110. The Sierra Club court’s extensive evaluation of the language and specific requirements of Section 112 was fundamental to its decision regarding the interpretation of Section 302(k). Importantly, the Sierra Club court observed that:

In requiring that sources regulated under section 112 meet the strictest standards, Congress gave no indication that it intended the application of MACT standards to vary based on different time periods. To the contrary, Congress specifically permitted the Administrator to “distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards,” CAA § 112(d)(1), 42 U.S.C. § 7412(d)(1). Additionally, while recognizing that in some instances it might not be feasible to prescribe or enforce an emission standard under § 112, Congress provided in section 112(h) for establishment of “work practice” or “operational” standards instead, but, as petitioners point out, “strictly limited this exception by defining ‘not feasible . . .’ to include only [two types of] situations,” and did not authorize the Administrator to relax emission standards on a temporal basis.

Sierra Club, 551 F.3d at 1028 (internal citations omitted). Based on its detailed analysis of the purpose and structure of Section 112, the Sierra Club court ultimately concluded that “[w]hen sections 112 and 302(k) are read together, then, Congress has required that there must be continuous section 112—compliant standards.” Sierra Club, 551 F.3d at 1027 (emphasis added). This limited holding does not support EPA’s assertion that there exists within the entire CAA an “explicit requirement for emission limitations that apply on a ‘continuous’ basis.” Legal Basis Memo at 4. Instead, Sierra Club is a very narrow decision that is limited to Section 112 and has no bearing on emissions limitations or SIPs under Section 110.

The second case, US Magnesium, related to a SIP Call directed as a specific provision in the Utah SIP known as the “Unavoidable Breakdown Rule” (“UBR”). US Magnesium, LLC v. EPA, 690 F.3d at 1159-61. In upholding the SIP Call, the court made three determinations with respect to EPA’s action. First, the court held that, when EPA is relying on the “requirements” prong of Section 110(k)(5) to issue a SIP Call, Section 110(k)(5) does not require EPA “to set out facts showing that the [SIP provision] has prevented [the state] from attaining or maintaining the NAAQS or otherwise complying with the CAA.” The court concluded that the
administrative record adequately supported EPA’s rule because it addressed the second Section 110(k)(5) prong—substantial adequacy with respect to a CAA “requirement.” *Id.* at 1167-68. Second, the court held that EPA’s reliance on its SSM guidance memoranda, and the interpretations those memoranda contained, did not render EPA’s action arbitrary and capricious. *Id.* at 1168. Third, the court held that the SIP Call did not conflict with prior EPA actions, including its SSM policy and “breakdown” provisions contained within EPA’s new source performance standards. *Id.* at 1169-70. These rulings were in response to arguments raised by *US Magnesium*, which did not directly challenge EPA’s underlying interpretation of the CAA and application of the definition of “emissions limitation” contained in Section 302(k). As a result, the *US Magnesium* court was not faced with the question of whether the CAA contains a literal “continuous” emissions limitation requirement, and did not decide that issue as EPA suggests. Moreover, the UBR at issue in US Magnesium was a malfunction-type provision. The court had no cause to consider the implications of EPA’s SSM policy or interpretation of the CAA with respect to startup and shutdown periods. While it did affirm a specific EPA rulemaking based on the arguments and facts raised in the context of that rulemaking, the limited holding of *US Magnesium* does not support EPA’s sweeping assertion that the CAA contains an “explicit requirement for emission limitations that apply on a ‘continuous’ basis.” Legal Basis Memo at 4.

For these reasons, the Group disagrees with EPA’s assertion that recent court decisions support the validity of the SIP Call. No court has squarely addressed EPA’s interpretation of the “emission limitation” definition in Section 302(k)(5) in the context of Section 110, and no court has held that the CAA broadly requires “continuous emissions limitations” as EPA suggests. Section 302(k)(5) specifically encompasses non-numeric limitations, such as work practice standards, and years of EPA precedent affirm the validity of limited exemptions from emissions limitations when justified by technological or operational constraints. Rather than adhering to these long-standing and practical applications of the CAA, the Proposal represents a dramatic shift in EPA policy based on an incorrect and unsupported interpretation of Section 302(k)(5). These flaws render the Proposal contrary to the CAA and arbitrary and capricious.

**B. The Proposed SSM Rule Is Based on Incorrect Assumptions.**

The SSM Proposal also is rendered arbitrary and capricious by its reliance on incorrect assumptions about startup and shutdown periods. EPA proposes to reverse over 30 years of EPA precedent and eliminate exemptions and affirmative defenses for startup and shutdowns. EPA’s primary basis for this dramatic policy shift is that startup and shutdown periods are planned and predictable. *See 78 Fed. Reg. at 12477.* However, EPA provides no support for its assertions, and ignores realities about the operation of controls during startup and shutdown periods. As explained above, startups and shutdowns are not always planned in advance, especially with respect to EGUs. *See supra*, Section III.A.1. In addition to lacking predictability, the operation

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22 Indeed, EPA’s own position is internally inconsistent, stating on one hand that “even the best available emissions control systems might not be consistently effective during startup or shutdown periods” while still asserting that “it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during [startup and shutdown] periods.” *78 Fed. Reg. at 12477.*
of APCDs during startup and shutdown periods is not always feasible and is limited by site-specific constraints like temperature and humidity. *Id.* Ignoring these constraints to operate controls during startup and shutdown can lead to unacceptable risks for worker and equipment safety.

EPA has recognized these operating constraints in recent rulemakings. In the MATS rule, EPA finalized work practice standards instead of the proposed numeric emissions limitations. See 77 Fed Reg. 9304 (Feb. 16, 2012). As its basis for this change, EPA expressly recognized operating constraints on certain pollution control technologies. In a memorandum explaining changes to the MATS rule upon reconsideration, EPA stated that:

[W]e also propose to revise the rule’s work practice requirements to recognize constraints of certain EGUs and APCDs. Specifically, after considering petitions that [fluidized bed combustion] EGUs that inject limestone for acid gas control need to be operated at temperatures at which limestone can calcine for most effective control of acid gases, we are proposing to revise the standards to allow limestone injection to start after appropriate temperatures as specified by the equipment manufacturer or installer have been attained in such EGUs. In addition, we acknowledge operating temperature constraints of SNCR systems, and we are proposing to revise the standards to allow such systems to start as soon as technically possible after the appropriate temperatures as specified by the equipment manufacturer or installer have been reached. We are also aware that SNCR and SCR systems with ammonia injection need to be operated within a prescribed and relatively narrow temperature window to provide nitrogen oxide (NOx) reductions and that dry scrubbers also need to be operated close to flue gas saturation temperature, and we have addressed these considerations in the proposed work practice requirements.

Maxwell Memorandum at 7. These statements—made by EPA just over six months ago—indicate that EPA is well aware of operational constraints during startup and shutdown that make the operation of certain APCDs impossible for some or all of the startup/shutdown period. EPA’s Proposal with respect to startup and shutdown periods ignores practical realities that EPA has long recognized and is therefore arbitrary and capricious.

C. The Proposed SSM Rule is Unreasonable.

The Class of ’85 believes that the Proposed SSM Rule is fatally flawed because it simply is unreasonable. It makes incorrect assumptions and conclusions, contains internal inconsistencies, and conflicts with decades of EPA interpretations.

1. The Proposal is based on faulty reasoning and contains inconsistent provisions.

As indicated above, the Proposal is based entirely on incorrect assumptions, reasoning, and conclusions. EPA ignores the technical limitations on operation of control equipment during startup and shutdown (planned or unplanned) and fails to link the current SSM provisions to nonattainment of the NAAQS. EPA fails to consider the practical impacts of the Proposal and
ignores the tremendous burden that the SIP Call would place on sources and regulatory agencies. EPA also fails to address flaws in its proposed malfunction criteria that, if adopted by states, would result in litigation, differing standards across circuits, and enforcement uncertainty. Further, the Proposal contains internal inconsistencies that make little sense and which EPA has failed to reasonably explain. For example, EPA does not explain how unplanned startup/shutdown affirmative defenses are not permissible but malfunction affirmative defenses are. See supra Section III.A.2. For these and other reasons, the Group believes that EPA should withdraw and reconsider its seriously flawed Proposal.

2. The Proposal represents a reversal of decades of consistent EPA policy.

EPA’s approach in the Proposal completely contradicts years of prior EPA policy statements, regulatory actions, and litigation positions. EPA has not adequately explained this reversal of decades-old policy. See Good Samaritan Hosp. v Shalala, 508 U.S. 402, 417 (1993) (courts may consider how much deference to grant agency interpretation of a statute when interpretation has changed). For example, EPA’s past memoranda on its SSM Policy repeatedly explain that excess emissions during periods of planned startup and shutdown may be subject to an affirmative defense:

• “[F]or a few sources there may exist infrequent short periods of excess emissions during startup and shutdown which cannot be avoided. Excess emissions during these infrequent short periods need not be treated as violations providing that the source adequately shows that the excess could not have been prevented through careful planning and design and that bypassing of control equipment was unavoidable to prevent loss of life, personal injury, or severe property damage.” Memorandum from Kathleen H. Bennett, Assistant Administrator for Air, Noise and Radiation to Regional Administrators, Attachment at 3 (Feb. 15, 1983).

• “For some source categories, given the types of control technologies available, there may exist short periods of emissions during startup and shutdown when, despite best efforts regarding planning, design, and operating procedures, the otherwise applicable emission limitations cannot be met....[I]t may be appropriate...to create narrowly-tailored SIP revisions that take these technological limitations into account and state that the otherwise applicable emissions limitations do not apply during narrowly defined startup and shutdown periods.” Memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance to Regional Administrators at 4-5 (Sept. 20, 1999).

• “[EPA’s policy is] not intended to alter the status of any existing malfunction, startup or shutdown provision in a SIP that has been approved by EPA.” Memorandum from Eric Schaeffer, Director, Office of Regulatory Enforcement to Regional Administrators at 1 (Nov. 8, 2001).

These are exactly the types of provisions that EPA now seeks to eliminate through its proposed SIP Call.
The policy reversal also is clear when examining EPA’s rulemakings. Since the early 1970s, EPA has approved many SIP revisions containing emissions exemptions during periods of startup, shutdown, and malfunction. For example, the Eleventh Circuit recently affirmed the validity of a 2008 EPA action that approved changes to Alabama’s SIP. During that approval, EPA stated that Alabama’s “Emergency Exception” does not provide “the same sort of exemption for equipment malfunctions that is included in other SIPs,” but that such malfunction exemptions “would be approvable, subject to certain limitations, under current EPA policy and guidance.” 73 Fed. Reg. 60957 (Oct. 15, 2008) (emphasis added);  Alabama Environmental Council, 711 F.3d 1277 (affirming EPA’s 2008 approval of the Alabama SIP). This statement plainly indicates that EPA in 2008 had no issue with approving SSM exemptions in situations where there was no evidence of an adverse impact on air quality.

Indeed, recent regulatory history is replete with EPA approvals of SIPs, or promulgation of FIPs containing the type of SSM provisions with which EPA now takes issue in the Proposal, including retention of affirmative defenses and other provisions addressing startup and shutdown periods. For example, in 2010, EPA approved a portion of the Texas SIP that provided an affirmative defense for malfunctions, along with a defense for unplanned maintenance, startup, and shutdown events. See 75 Fed. Reg. 68989 (Nov. 10, 2010). The Proposal does not explain why EPA so recently approved an affirmative defense for certain unplanned startup/shutdown events, but no longer will do so going forward. Instead, EPA inexplicably states that its action on the Texas SIP is consistent with the Proposal. See Legal Basis Memo at 8, 20. Additional EPA actions include, but are not limited to, the following:

- 74 Fed. Reg. 46910 (Sept. 14, 2009). Approving affirmative defense for startups, shutdowns, and malfunctions in New Mexico SIP, and stating that “EPA recognizes that imposition of a penalty for sudden and unavoidable malfunctions, startups or shutdowns caused by circumstances entirely beyond the control of the owner or operator may not be appropriate.” Id. at 46912.

- 73 Fed. Reg. 21418 (Apr. 21, 2008). Establishing a FIP for Billings/Laurel, Montana, containing specific emissions limits and an “affirmative defense to a claim for civil penalties for exceedances of such limits during periods of malfunction, startup, or shutdown.” Id. at 21464.

- 71 Fed. Reg. 53631 (Sept. 12, 2006). Establishing a FIP to regulate emissions from the Four Corners Power Plant located on the Navajo Indian Reservation near Farmington, New Mexico. Among other things, the FIP provides an affirmative defense for malfunctions, and further provides a startup and shutdown emissions exemption, stating that “[d]uring periods of startup and shutdown the otherwise applicable emission limits or requirements for opacity and particulate matter shall not apply.” Id. at 53639 (emphasis added).


• 66 Fed. Reg. 53658 (Oct. 23, 2001). Approving SIP for Jefferson County, Kentucky, including provisions governing “Emissions During Startups, Shutdowns, Malfunctions and Emergencies.” Id. at 53660. In approving the SIP, EPA noted that “[i]n reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the CAA.” Id. at 53659.

As these and other regulatory actions indicate, EPA routinely has approved state-designed SSM provisions, including emissions exemptions, and even has promulgated such exemptions itself. These actions are entirely consistent with EPA’s prior SSM policy memoranda, which recognized the need to address startup and shutdown emissions while also providing affirmative defense provisions for both malfunction periods and startup/shutdown periods.

The Proposal’s reliance on faulty assumptions, its conflicting and inconsistent provisions, and its unexplained rejection of longstanding EPA policy toward excess emissions during periods of startup and shutdown render the Proposal completely unreasonable. It is fundamentally flawed and should be rescinded.

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23 It is not just EPA’s actions on SIPs and FIPs that recognize an exemption for periods of startup, shutdown, and malfunctions; EPA’s implementing regulations for the New Source Performance Standards (“NSPS”) also recognize such exemptions. These regulations require that performance tests be conducted under conditions that are representative of the performance of the affected facility. However, the regulations specifically provide that “operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.” 40 C.F.R. § 60.8(c). Not only do the NSPS regulations exclude SSM periods from the scope of “representative conditions,” but the regulations also provide a presumptive exemption from emissions limitations during SSM periods. The Proposal represents a sharp departure from these well-established regulatory principles.

24 As recently as April 1, 2013, EPA entered into a settlement agreement with Dominion Energy that provides allowances for excess emissions during startup and shutdown at plants in Massachusetts, Illinois and Indiana. The settlement agreement allows an EGU to operate without the ESP when it is not practicable and provides for an affirmative defense to stipulated penalties for excess emissions occurring during startup and shutdown. See Consent Decree in United States v. Dominion Energy ¶¶ 89, 140 (Apr. 1, 2013), at http://www.epa.gov/enforcement/air/documents/decrees/dominionenergy-cd.pdf. Yet, EPA’s proposed rule would require revision of the affirmative defense provisions in the Illinois and Indiana SIPs. See 78 Fed. Reg. at 12515-17.
V. CONCLUSION

The Class of ‘85 appreciates the opportunity to comment on the Proposal. As explained in its Comments, the Group believes that EPA should approach SSM issues in a manner that is consistent with the CAA and prior EPA actions, reflects real-world operating scenarios, and is based on sound data and policy.

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Respectfully submitted,

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