6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R01-OAR-2017-0083; FRL- 9978-27-Region 1]

Air Plan Approval; New Hampshire; Nonattainment Plan for the Central New Hampshire Sulfur Dioxide Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving the State Implementation Plan (SIP) revision that the State of New Hampshire submitted to EPA on January 31, 2017, for attaining the 1-hour sulfur dioxide (SO_2) primary national ambient air quality standard (NAAQS) for the Central New Hampshire Nonattainment Area. This plan (herein called a "nonattainment plan") includes New Hampshire's attainment demonstration and other elements required under the Clean Air Act (CAA). In addition to an attainment demonstration, the nonattainment plan addresses the requirements for meeting reasonable further progress (RFP) toward attainment of the NAAQS, implementation of reasonably available control measures and reasonably available control technology (RACM/RACT), base-year and projection-year emission inventories, enforceable emissions limitations and control measures, and contingency measures. EPA concludes that New Hampshire has appropriately demonstrated that the nonattainment plan provisions provide for attainment of the 2010 1-hour primary SO_2 NAAQS in the Central New Hampshire Nonattainment Area by the applicable attainment date and that the nonattainment plan meets the other applicable requirements under the CAA. This action is being taken in accordance with the CAA.

DATES: This rule is effective on **[Insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA-R01-OAR-2017-0083. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available at www.regulations.gov or at the U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Permits Toxics and Indoor Programs Unit, 5 Post Office Square - Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays.

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SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, we mean EPA.

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I. Background and Purpose

On June 22, 2010, EPA promulgated a new 1-hour primary SO_2 NAAQS of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99^{th} percentile of daily maximum 1-hour concentrations does not exceed 75 ppb, as determined in accordance with appendix T of 40 CFR part 50. *See* 75 FR 35520, codified at 40 CFR 50.17(a) and (b). On August 5, 2013, EPA designated a first set of 29 areas of the country as nonattainment for the 2010 SO_2 NAAQS, including the Central New Hampshire Nonattainment Area within the State of New Hampshire. *See* 78 FR 47191, codified at 40 CFR part 81, subpart C. These "round one" area designations were effective October 4, 2013. Section 191(a) of the CAA directs states to submit SIPs for areas designated as nonattainment for the SO_2 NAAQS to EPA within 18 months of the effective date of the designation, i.e., by no later than April 4, 2015 in this case. These SIPs are required to demonstrate that their respective areas will attain the NAAQS as expeditiously as practicable, but no later than 5 years from the effective date of designation, which is October 4, 2018, in accordance with CAA sections 191-192.

Section 192(a) requires that such plans shall provide for NAAQS attainment as expeditiously as practicable, but no later than 5 years from the effective date of the nonattainment designation. Section 172(c) of part D of the CAA lists the required components of a nonattainment plan submittal. The base year emissions inventory (section 172(c)(3)) is required to show a "comprehensive, accurate, current inventory" of all relevant pollutants in the nonattainment area. The nonattainment plan must identify and quantify any expected emissions from the construction of new sources to account for emissions in the area that might affect reasonable further progress

(RFP) toward attainment, or that might interfere with attainment and maintenance of the NAAQS, and it must provide for a nonattainment new source review (NNSR) program (section 172(c)(5)). The attainment demonstration must include a modeling analysis showing that the enforceable emissions limitations and other control measures taken by the state will provide for RFP and expeditious attainment of the NAAQS (section 172(c)(2), (4), (6), and (7)). The nonattainment plan must include an analysis and provide for implementation of the RACM considered, including RACT (section 172(c)(1)). Finally, the nonattainment plan must provide for contingency measures (section 172(c)(9)) to be implemented either in the case that RFP toward attainment is not made, or in the case that the area fails to attain the NAAQS by the attainment date.

On April 23, 2014, EPA issued a guidance document entitled, "Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions." This guidance provides recommendations for the development of SO_2 nonattainment SIPs to satisfy CAA requirements (*see*, e.g., sections 172, 191, and 192). An attainment demonstration must also meet the requirements of 40 CFR part 51, subparts F and G, and 40 CFR part 51, appendix W (the *Guideline on Air Quality Models*; "the *Guideline*"), and include inventory data, modeling results, and emissions reduction analyses on which the state has based its projected attainment. The guidance also discusses criteria EPA expects to use in assessing whether emission limits with longer averaging times of up to 30 days ensure attainment of the SO_2 NAAQS.

For a number of areas, including the Central New Hampshire Nonattainment Area, EPA published a document on March 18, 2016, that pertinent states had failed to submit the required SO_2 nonattainment plan by the submittal deadline. *See* 81 FR 14736. This finding initiated a deadline under CAA section 179(a) for the potential imposition of new source review and highway funding sanctions, and for EPA to promulgate a federal implementation plan (FIP)

under section 110(c) of the CAA. In response to the requirement for SO_2 nonattainment plan submittals, New Hampshire submitted a nonattainment plan for the Central New Hampshire Nonattainment Area on January 31, 2017. Pursuant to New Hampshire's January 31, 2017 submittal and EPA's subsequent completeness determination letter dated March 20, 2017, these sanctions under section 179(a) will not be imposed as a result of New Hampshire's having missed the April 4, 2015 submission deadline. Furthermore, with this current action issuing final approval of New Hampshire's SIP submittal, EPA's FIP obligation no longer applies, and no FIP will be imposed as a result of New Hampshire's missing the deadline.

On November 29, 2017, EPA received a letter from New Hampshire correcting a misstatement in its January 2017 submittal to EPA. The State had earlier intended to modify its January 2017 submittal to EPA in response to a public comment on its draft nonattainment area plan, but inadvertently neglected to make the correction. Specifically, the State enclosed in its January 2017 submittal to EPA all comments and responses to comments relating to its draft nonattainment area plan, and among those was a set of comments submitted by Sierra Club to the State on January 5, 2017. Among other comments, Sierra Club asserted that the draft nonattainment area plan "incorrectly suggests that an attainment demonstration can be made based on monitor readings alone," counter to EPA's April 2014 guidance, and stated that the plan should be revised to remove this inconsistency. In its response to that comment, New Hampshire indicated that it would remove the language per Sierra Club's comment, but inadvertently included the erroneous language nonetheless in its January 2017 submittal to EPA. New Hampshire's November 29, 2017 correction modifies the State's original submittal to exclude the erroneous language identified by Sierra Club, consistent with the State's response to comments. Hereafter, references to the State's January 31, 2017 SIP submittal are intended to include the November 29, 2017 correction.

On September 28, 2017 (82 FR 45242), EPA proposed to approve New Hampshire's January 31, 2017 nonattainment plan submittal and SO_2 attainment demonstration. The State's submittal and attainment demonstration included all the specific attainment elements mentioned above, including new SO_2 emission limits found to be comparably stringent to the 1-hour form of the primary SO_2 NAAQS and associated control technology efficiency requirements for the electric generating source Merrimack Station, currently owned and operated by GSP Merrimack LLC and formerly by Public Service of New Hampshire (PSNH) d/b/a Eversource Energy, impacting the Central New Hampshire Nonattainment Area. Merrimack Station's new SO_2 emission limits were developed in accordance with EPA's April 2014 guidance. Comments on EPA's proposed rulemaking were due on or before October 30, 2017. EPA received a single set of comments on the proposed approval of New Hampshire's nonattainment area plan for the Central New Hampshire Nonattainment Area. The comments are available in the docket for this final rulemaking action. EPA's summary of the comments and EPA's responses are provided below. For a comprehensive discussion of New Hampshire's SIP submittal and EPA's analysis and rationale for approval of the State's submittal and attainment demonstration for this area, please refer to EPA's September 28, 2017 notice of proposed rulemaking.

The remainder of this preamble summarizes EPA's final approval of New Hampshire's SIP submittal and attainment demonstration for the Central New Hampshire Nonattainment Area and contains EPA's response to public comments.

II. Response to Comments

The single set of comments addressing the proposed approval of the SIP revision for the Central New Hampshire Nonattainment Area was received from Sierra Club on October 30, 2017. The Sierra Club's October 30, 2017 comments explicitly incorporated a July 15, 2016 comment letter with supporting attachments submitted to New Hampshire by Sierra Club on

behalf of both Sierra Club and Conservation Law Foundation (CLF) regarding the State's proposed permit for Merrimack Station. Because the October 30, 2017 Sierra Club comments on EPA's proposal are nearly identical to the prior July 15, 2016 comments, except where the October 30, 2017 comments provide updated information, EPA's responses to the October 30, 2017 Sierra Club comments also serve to respond to issues raised in the July 15, 2016 comments to the State, except where EPA identifies discussion as specifically applying only to comments from July 15, 2016. In the following discussion, EPA will refer to the Sierra Club or Sierra Club/CLF as "the Commenter." To review the complete set of comments received, refer to the docket for this rulemaking as identified above. A summary of the comments received and EPA's responses are provided below.

Comment 1: The commenter asserted that the proposed 7-day average limit on emissions from Merrimack Station is insufficient to protect the 1-hour NAAQS. The commenter indicated that short-term exposure to SO_2 for as little as five minutes has significant health impacts and causes decrement in lung function, aggravation of asthma, chest tightness, and respiratory and cardiovascular morbidity. The commenter stated that such short-term exposure is especially risky for children with asthma. To support these statements regarding health effects, the commenter cited several EPA documents related to the final SO_2 NAAQS and air quality trends. The commenter stated that EPA changed the NAAQS from 140 ppb averaged over 24 hours to 75 ppb averaged over one hour in order to address these health impacts. The commenter stated that as a result of the form of the standard, which is evaluated through reference to the fourth-highest daily maximum hourly-average concentrations in each year, emission limits with an averaging period longer than one hour are highly unlikely to be able to protect the 1-hour NAAQS. The commenter indicated that the form of the NAAQS means that ambient air quality can be evaluated as unsafe with as few as four hours of elevated emissions over the course of a

year. The commenter stated that even if the 7-day limit is complied with, possible short-term emission "spikes" that may coincide with startup, shutdown, or control system malfunction events, for example, could nevertheless cause ambient 1-hour SO_2 concentrations sufficient to violate the NAAQS. In support of this point, the commenter provided language making similar points excerpted from two EPA letters that had been included in the attachments to the commenter's July 15, 2016 comments to New Hampshire, specifically an August 12, 2010 comment letter from EPA Region 7 to Kansas regarding the Sunflower Holcomb Station Expansion Project, and a February 1, 2012 comment letter from EPA Region 5 to Michigan regarding a draft construction permit for the Detroit Edison Monroe Power Plant. The commenter concluded that the 7-day limit proposed for inclusion in the State's SIP has an averaging period that is 168 times longer than that of the 1-hour NAAQS and should be revised to adequately protect the NAAQS. The commenter added that hourly emissions limits are not unreasonable, and cited several examples of permits that impose such limits. Therefore, the commenter concluded that a 1-hour emissions limit should be imposed.

Response 1: EPA appreciates the commenter's concerns about the appropriateness of approving nonattainment plans with emission limitations that apply over a longer time period than the 1-hour form of the 2010 SO_2 NAAQS. We discussed similar issues in EPA's April 2014 guidance. In this case, EPA has concluded that the approach employed by New Hampshire to develop the emission limitations for Merrimack Station and included in the State's SIP submittal is consistent with recommendations discussed in EPA's April 2014 guidance and adequately protects against violation of the 1-hour SO_2 NAAQS. EPA's rationale for this conclusion is explained in further detail below.

The health effects information provided by the commenter is not in dispute in this rulemaking. This rulemaking instead addresses whether New Hampshire's plan is adequate to meet the previously established NAAQS.

As mentioned above, CAA section 172(c) directs states with areas designated as nonattainment to demonstrate that the submitted nonattainment plan provides for attainment of the NAAQS. EPA's rules at 40 CFR part 51, subpart G further delineate the control strategy requirements that SIPs must meet, and EPA has long required that all control strategies in nonattainment plans reflect four fundamental principles of quantification, enforceability, replicability, and accountability. *See* "State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990; Proposed Rule," 57 FR 13498 (April 16, 1992) (General Preamble), at 13567-68. Additional guidance is provided in EPA's April 2014 guidance. For SO_2, there are generally two components needed to support an attainment demonstration submitted under section 172(c): (1) emission limitations and other control measures that assure implementation of permanent, enforceable, and necessary emission controls; and (2) a modeling analysis that meets the requirements of 40 CFR part 51, appendix W and demonstrates that these emission limitations and control measures provide for timely attainment of the primary SO_2 NAAQS as expeditiously as practicable, but by no later than the applicable attainment date for the affected area. In all cases, the emission limitations and control measures must be accompanied by appropriate methods and conditions to determine compliance with the respective emission limitations and control measures. Furthermore, in all cases, the emission limitations and control measures must be: quantifiable (i.e., a specific amount of emission reduction can be ascribed to the measures), fully enforceable (specifying clear, unambiguous, and measurable requirements for which compliance can be practicably determined), replicable (the procedures for determining compliance are sufficiently specific and

non-subjective such that two independent entities applying the procedures would obtain the same result), and accountable (source specific limitations must be permanent and must reflect the assumptions used in the SIP demonstrations).

In our April 2014 guidance, EPA notes that past Agency guidance has recommended that averaging times in SO_2 SIP emissions limitations should not exceed the averaging time of the applicable NAAQS that the limit is intended to help attain (e.g., addressing emissions averaged over one or three hours). EPA's April 2014 guidance also discusses the possibility of utilizing emission limitations with longer averaging times of up to 30 days, so long as the state meets various suggested criteria to show that the longer-term limits are comparably stringent to the 1-hour critical emission value that is needed to meet the NAAQS. *See* EPA's April 2014 guidance, pp. 22 to 39. The guidance recommends that—should states elect to use longer averaging times—the longer-term average limit should be set at an adjusted level to reflect a stringency comparable to the 1-hour average critical emission value shown to provide for attainment through a modeling analysis that the plan otherwise would have set as an emission limit.

At the outset, EPA notes that the specific examples of earlier EPA statements cited by the commenter (i.e., those contained in Exhibits 1, 2, 3, and 4 to Appendix A of the comment submission) all pre-date the release of EPA's April 2014 guidance. As such these examples only reflect the Agency's development of its policy for implementing the 2010 SO_2 NAAQS as of the dates of their own issuance. At the time of their issuance, EPA had not yet addressed the specific question of whether it might be possible to devise an emission limit with an averaging period longer than 1-hour, with appropriate adjustments that would make it comparably stringent to an emission limit shown to attain 1-hour emission level, that could adequately ensure attainment of the SO_2 NAAQS. None of the pre-2014 EPA documents cited by the commenter address this question; consequently, it is not reasonable to read any of them as rejecting that possibility.

However, EPA's April 2014 guidance specifically addressed this issue as it pertains to requirements for SIPs for SO_2 nonattainment areas under the 2010 NAAQS, especially with regard to the use of appropriately set comparably stringent limitations based on averaging times as long as 30 days (*see* p. 2). EPA developed this guidance pursuant to a lengthy stakeholder outreach process regarding implementation strategies for the 2010 NAAQS, which had not yet concluded (or in some cases even begun) when the documents cited by the commenter were issued. As such, EPA's April 2014 guidance was the first instance in which the Agency provided recommended guidance for that component of this action. Consequently, EPA does not view those prior EPA statements as conflicting with the Agency's guidance addressing this specific question of how to devise a longer-term limit that is comparably stringent to a 1-hour critical emission value that has been modeled to attain the NAAQS. Moreover, EPA notes that the commenter has not raised specific objections to the general policy and technical rationale EPA provided in its proposed approval or in EPA's April 2014 guidance for why such longer-term averaging-based limits may in specific cases be adequate to ensure NAAQS attainment, which we again summarize below.

EPA's April 2014 guidance provides an extensive discussion of EPA's rationale for positing that an appropriately-set, comparably stringent limitation based on an averaging time as long as 30 days can, based on a situation's specific facts, be found to provide for attainment of the 2010 primary SO_2 NAAQS, provided it is shown to be comparably stringent to a 1-hour critical emission value that is demonstrated through modeling to attain the NAAQS. Essentially, to achieve such comparable stringency, rather than simply convert an attaining 1-hour emission rate to a longer term limit at the same level, it is expected that an adjustment would be needed to lower the emission rate as the averaging time is increased. It is first necessary to identify a modeled 1-hour emission value that attains the NAAQS before deriving a comparably stringent

longer-term emission limit, i.e., an emission limit that has been appropriately adjusted downward. In evaluating this option, EPA considered in the April 2014 guidance the nature of the standard, conducted detailed analyses of the impact of the use of 30-day average limits on the prospects for attaining the standard, and carefully reviewed how best to achieve an appropriate balance among the various factors that warrant consideration in judging whether a state's nonattainment plan provides for attainment. *Id.* at pp. 22 to 39. *See* also *id.* at appendices B, C, and D.

As specified in 40 CFR 50.17(b), the 1-hour primary SO_2 NAAQS is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour concentrations is less than or equal to 75 ppb. In a year with 365 days of valid monitoring data, the 99th percentile would be the fourth highest daily maximum 1-hour value. The 2010 SO_2 NAAQS, including this form of determining compliance with the standard, was upheld by the U.S. Court of Appeals for the District of Columbia Circuit in *Nat'l Envt'l Dev. Ass'n's Clean Air Project* v. *EPA*, 686 F.3d 803 (D.C. Cir. 2012). Because the standard has this form, a single exceedance of the numerical limit of 75 ppb does not constitute a violation of the standard. Instead, at issue is whether a source operating in compliance with a properly set longer-term average could cause exceedances, and if so the resulting frequency and magnitude of such exceedances. In particular, what matters is whether EPA can have reasonable confidence that a properly set longer-term average limit will provide that the 3-year average of annual fourth highest daily maximum values will be at or below 75 ppb. A synopsis of EPA's review of how to judge whether such plans "provide for attainment," based on modeling of projected allowable emissions and in light of the form for determining attainment of the NAAQS at monitoring sites, follows.

For SO_2 nonattainment plans based on 1-hour emission limits, the standard approach is to conduct modeling using fixed emission rates. The maximum emission rate that would be modeled to result in attainment (i.e., in an "average year"[1] shows fewer than four days with maximum hourly levels exceeding 75 ppb) is labeled the "critical emission value." The modeling process for identifying this critical emission value inherently considers the numerous variables that affect ambient concentrations of SO_2, such as meteorological data, background concentrations, and terrain. In the standard approach, the state would then provide for attainment by setting a continuously applicable 1-hour emission limitation at this critical emission value.

EPA recognizes that some sources may have highly variable emissions, for example due to variations in fuel sulfur content and operating rate, that can make it extremely difficult, even with a well-designed control strategy, to ensure in practice that emissions for any given hour do not exceed the critical emission value. EPA also acknowledges the concern that longer-term emission limits can allow short periods with emissions above the critical emission value, which, if coincident with meteorological conditions conducive to high SO_2 concentrations, could create the possibility of a NAAQS exceedance occurring on a day when an exceedance would not have occurred if emissions were continuously controlled at the level corresponding to the 1-hour critical emission value. However, for several reasons, EPA finds that the approach recommended in its April 2014 guidance document suitably addresses this concern, and that in this case, New Hampshire has devised a longer-term limit that is comparably stringent to the 1-hour critical emission value that suitably provides for meeting the NAAQS.

First, from a practical perspective, EPA expects the actual emission profile of a source subject to an appropriately set longer-term average limit to be similar to the emission profile of a

[1] An "average year" is used to mean a year with average air quality. While 40 CFR part 50, appendix T provides for averaging three years of 99th percentile daily maximum values (e.g., the fourth highest maximum daily concentration in a year with 365 days with valid data), this discussion and an example used later in EPA's response to Comment 1 uses a single "average year" in order to simplify the illustration of relevant principles.

source subject to an analogous 1-hour average limit. EPA expects this similarity because it has recommended that the longer-term average limit be set at a level that is comparably stringent to the otherwise applicable 1-hour limit (reflecting a downward adjustment from the critical emission value) and that takes the source's emissions profile into account. As a general matter, EPA would expect that any emission limit with an averaging time longer than 1 hour would need to reflect a downward adjustment to compensate for the loss of stringency inherent in applying a longer term average limit. This expectation is based on the idea that a limit based on the 30-day average of emissions, for example, at a particular level is likely to be a less stringent limit than a 1-hour limit at the same level, since the control level needed to meet a 1-hour limit every hour is likely to be greater than the control level needed to achieve the same limit on a 30-day average basis. EPA's approach for downward adjustment is to account for the expected variability in emissions over the time period up to 30 days to achieve comparable stringency to the emissions and expected air quality impacts for a 1-hour period. As a result, EPA expects either form of emission limit to yield comparable air quality.

Second, from a more theoretical perspective, EPA has compared the likely air quality with a source having maximum allowable emissions under an appropriately set longer-term limit, as compared to the likely air quality with the source having maximum allowable emissions under the comparable 1-hour limit. In this comparison, in the 1-hour average limit scenario, the source is presumed at all times to emit at the critical emission value, and in the longer-term average limit scenario, the source is presumed occasionally to emit more than the critical emission value but on average, and presumably at most times, to emit well below the critical emission value. In an "average year," compliance with the 1-hour limit is expected to result in three exceedance days (i.e., three days with maximum hourly values above 75 ppb) and a fourth day with a maximum hourly value at 75 ppb. By comparison, with the source complying with a longer-term

limit, it is possible that additional exceedances would occur that would not occur in the 1-hour limit scenario (if emissions exceed the critical emission value at times when meteorology is conducive to poor air quality). However, this comparison must also factor in the likelihood that exceedances that would be expected in the 1-hour limit scenario would not occur in the longer-term limit scenario. This result arises because the longer-term limit requires lower emissions most of the time (because the limit is set below the critical emission value), so a source complying with an appropriately set longer-term limit is likely to have lower emissions at critical times than would be the case if the source were emitting as allowed with a 1-hour limit.

As a hypothetical example to illustrate these points, suppose a source that always emits 1,000 pounds of SO_2 per hour, which results in air quality exactly at the level of the NAAQS (i.e., results in a design value of 75 ppb). Suppose further that in an "average year," these emissions cause the five highest maximum daily average 1-hour concentrations to be 100 ppb, 90 ppb, 80 ppb, 75 ppb, and 70 ppb. Then suppose that the source becomes subject to a 30-day average emission limit of 700 pounds per hour, i.e., at a level adjusted downward from 1,000 pounds per hour by 30%. It is theoretically possible for a source meeting this limit to have emissions that occasionally exceed 1,000 pounds per hour, but with a typical emissions profile emissions would much more commonly be between 600 and 800 pounds per hour. In this simplified example, assume a zero background concentration, which allows one to assume a linear relationship between emissions and air quality. (A nonzero background concentration would make the mathematics more difficult but would give similar results.) Air quality will depend on how much emissions occur on which critical hours, but suppose that emissions at the relevant times on these five days are 800 pounds per hour, 1,100 pounds per hour, 500 pounds per hour, 900 pounds per hour, and 1,200 pounds per hour, respectively. (This is a conservative example because the average of these emissions, 900 pounds per hour, is well over the 30-day average

emission limit of 700 pounds per hour.) These emissions would result in daily maximum 1-hour concentrations of 80 ppb, 99 ppb, 40 ppb, 67.5 ppb, and 84 ppb. In this example, the fifth day would have an exceedance that would not otherwise have occurred, but the third and fourth days would not have exceedances that otherwise would have occurred. In this example, the fourth highest maximum daily concentration under the 30-day average would be 67.5 ppb.

This simplified example illustrates the findings of a more complicated statistical analysis that EPA conducted using a range of scenarios using actual plant data. As described in appendix B of EPA's April 2014 guidance, EPA found that the requirement for lower average emissions is highly likely to yield better air quality than is required with a comparably stringent 1-hour limit. Based on analyses described in appendix B, EPA expects that an emission profile with maximum allowable emissions under an appropriately set comparably stringent 30-day average limit is likely to have the net effect of having a *lower* number of exceedances and better air quality than an emission profile with maximum allowable emissions under a 1-hour emission limit at the critical emission value. This result provides a compelling rationale for allowing the use of a longer averaging period, in appropriate circumstances where the facts indicate that this result can be expected to occur.

The question then becomes whether this approach—which is likely to produce a lower number of overall exceedances even though it may produce some unexpected exceedances above the 1-hour critical emission value—meets the requirement in sections 110(a) and 172(c) for state implementation plans to "provide for attainment" of the NAAQS. For SO_2, as for other pollutants, it is generally impossible to design a nonattainment plan in the present that will guarantee that attainment will occur in the future. A variety of factors can cause a well-designed nonattainment plan to fail and unexpectedly not result in attainment, for example if meteorology occurs that is more conducive to poor air quality than was anticipated in the plan. Therefore, in

determining whether a plan meets the requirement to provide for attainment, EPA's task is commonly to judge not whether the plan provides absolute certainty that attainment will in fact occur, but rather whether the plan provides an adequate level of confidence of prospective NAAQS attainment. From this perspective, in evaluating use of a longer-term limit up to 30-days, EPA must weigh the likely net effect on air quality. Such an evaluation must consider the risk that occasions with meteorology conducive to high concentrations will have elevated emissions leading to exceedances that would not otherwise have occurred, and must also weigh the likelihood that the requirement for lower emissions on average will result in days not having exceedances that would have been expected with emissions at the critical emission value. Additional policy considerations, such as in this case the desirability of accommodating real world emissions variability without significant risk of violations, are also appropriate factors for EPA to weigh in judging whether a plan provides a reasonable degree of confidence that the plan will lead to attainment. Based on these considerations, especially given the high likelihood that a continuously enforceable limit, averaged over as long as 30 days, determined in accordance with EPA's April 2014 guidance, will result in attainment, EPA posits as a general matter that such limits, if appropriately determined, can reasonably be considered to provide for attainment of the 2010 SO_2 NAAQS. Furthermore, as discussed below, EPA concludes that in this case, New Hampshire has demonstrated that its longer-term limit was appropriately determined and provides for NAAQS attainment.

As stated by the commenter, the limit included in the State's SIP submittal is for a period of 7 days, or 168 hours. As stated above, EPA posits that limits based on periods of as long as 30 days (720 hours), determined in accordance with our April 2014 guidance, can, in many cases, be reasonably considered to provide for attainment of the 2010 SO_2 NAAQS. In EPA's April 2014 guidance, EPA supplied an analysis of the impact of emissions variability on air quality and

explained that it may be possible in some specific cases to develop control strategies that account for variability in 1-hour emissions rates through emissions limits with averaging times as long as 30 days and still provide for attainment of the 2010 SO_2 NAAQS. Since seven days (168 hours) are well within the period of 30 days (720 hours), EPA has concluded that a limit for Merrimack Station based on a period of 7 days and determined in accordance with EPA's April 2014 guidance can be reasonably considered to provide for attainment.

EPA's April 2014 guidance offers specific recommendations for determining an appropriate longer-term average limit. The recommended method starts with determination of the 1-hour emission limit that would provide for attainment (i.e., the 1-hour critical emission value), and applies an adjustment factor to determine the (lower) level of the longer term average emission limit that would be estimated to have a stringency comparable to the otherwise necessary 1-hour emission limit. This method uses a database of continuous emission data reflecting the type of control that the source will be using to comply with the SIP emission limits, which (if compliance requires new controls) may require use of a different emission database, e.g., from a different but comparable facility using similar emissions control equipment. The recommended method involves using these data to compute a complete set of emission averages, computed according to the averaging time and averaging procedures of the prospective emission limitation. In this recommended method, the ratio of the 99th percentile among these longer-term averages to the 99th percentile of the 1-hour values represents an adjustment factor that may be multiplied by the candidate 1-hour emission limit (i.e., the critical emission value) to determine a longer-term average emission limit that may be considered comparably stringent.[2] The guidance also addresses a variety of related topics, such as the potential utility of setting supplemental emission

[2] For example, if the critical emission value is 1,000 pounds of SO_2 per hour, and a suitable adjustment factor is determined to be 0.70 (i.e., 70%), the recommended longer term average limit would be 700 pounds per hour.

limits, such as mass-based limits, to reduce the likelihood and/or magnitude of elevated emission levels that might occur under the longer-term emission rate limit.

Preferred air quality models for use in regulatory applications are described in appendix A of the *Guideline* (40 CFR part 51, appendix W).[3] In 2005, EPA promulgated AERMOD as the Agency's preferred near-field dispersion modeling for a wide range of regulatory applications addressing stationary sources (for example in estimating SO_2 concentrations) in all types of terrain based on extensive developmental and performance evaluation. Supplemental guidance on modeling for purposes of demonstrating attainment of the SO_2 standard is provided in appendix A to EPA's April 2014 guidance. Appendix A provides extensive guidance on the modeling domain, the source inputs, assorted types of meteorological data, and background concentrations. Consistency with the recommendations in this guidance is generally necessary for the attainment demonstration to offer adequately reliable assurance that the plan provides for attainment.

As stated previously, attainment demonstrations for the 2010 1-hour primary SO_2 NAAQS must demonstrate future attainment and maintenance of the NAAQS in the entire area designated as nonattainment (i.e., not just at the violating monitor) by using air quality dispersion modeling (*see* appendix W to 40 CFR part 51) to show that the mix of sources and enforceable control measures and emission rates in an identified area will not lead to a violation of the SO_2 NAAQS. For a short-term (i.e., 1-hour) standard, EPA asserts that dispersion modeling, using allowable emissions and addressing stationary sources in the affected area (and in some cases those sources located outside the nonattainment area which may affect attainment in the area) is technically appropriate, efficient, and effective in demonstrating attainment in nonattainment areas because

[3] The most recent version of the *Guideline* was published on January 17, 2017 (*see* 82 FR 5182) and became effective on May 22, 2017.

it takes into consideration combinations of meteorological and emission source operating conditions that may contribute to peak ground-level concentrations of SO_2.

Regarding the commenter's position that only hourly SO_2 emissions limits are reasonable, citing the examples supplied in the commenter's submission, EPA agrees that 1-hour limits can be reasonable and protective so long as they are adequately supported by an attainment demonstration establishing those limits as meeting the NAAQS. In this action, EPA is not changing its position regarding the sufficiency in meeting the NAAQS with 1-hour emissions limitations to which other facilities, as cited by the commenter, are subject. The fact that New Hampshire could reasonably have chosen to establish 1-hour limits does not mean that EPA should disapprove limits with comparable stringency using longer averaging times. In this instance, the State's emission limit for Merrimack Station utilizes a 7-day average, and New Hampshire has shown it to be comparably stringent to a 1-hour limit at the critical emission level, which the State demonstrated to suitably provide for attainment of the NAAQS.

Based on EPA's review of the State's submittal, EPA finds that the 7-day average limit of 0.39 pounds (lb) per million British thermal units (MMBtu) established for Merrimack Station provides for a suitable alternative to establishing a 1-hour average emission limit for this source. New Hampshire used a suitable data profile in an appropriate manner and has thereby applied an appropriate adjustment, yielding emission limits that have comparable stringency to the 1-hour average limit that the State determined would otherwise have been necessary to provide for attainment. While the longer-term averaging limit allows occasions in which emissions may be higher than the level that would be allowed with the 1-hour limit, the State's limits compensate by requiring average emissions to be adequately lower than the level that would otherwise have been required by a 1-hour average limit. The September 28, 2017 notice of proposed rulemaking provided a detailed description of EPA's rationale for the proposed finding that the 7-day

average limit for Merrimack Station is adequate to provide for attainment, and the commenter has not raised any concerns about this approach that we have not already addressed.

Comment 2: The commenter states that the 7-day average approach would mask significant hours in which emissions are above safe levels. The commenter then presents information regarding historic hourly emissions from Merrimack Station after the flue gas desulfurization (FGD) scrubber system was installed. Specifically, using data from EPA's Air Markets Program Data (AMPD), the commenter identified over 224 individual hours on 62 separate days in the period between January 1, 2012, through September 30, 2017, during which emissions were above the 1-hour critical emission rate of 0.54 lb/MMBtu,[4] i.e., the maximum hourly emission rate determined to be protective of the NAAQS. The commenter indicated that during the same period, there do not appear to have been any 7-day periods in which average emissions exceeded the 0.39 lb/MMBtu limit in the SIP revision. The commenter asserts that this disparity, i.e., the fact that emissions during over 224 hours on 62 separate days exceeded the 1-hour critical emission rate of 0.54 lb/MMBtu while the 7-day limit was not exceeded during the time period from January 2012 through September 2017, indicates that the downwardly adjusted 0.39 lb/MMBtu 7-day limit is inadequate to protect the NAAQS.

Response 2: The commenter implies that occasions of emissions above the 1-hour critical emission rate, notwithstanding compliance with a 7-day limit, create an unacceptable risk of additional exceedances that would result in violation of the standard. EPA does not agree with this notion, and the commenter has not supplied evidence to support it. Furthermore, in making this claim, the commenter is relying on an emissions dataset that, for the reasons enumerated below, is not appropriate for assessing the prospective likelihood of Merrimack Station emitting

[4] In multiple instances, the Commenter appears to inaccurately assume the critical emission rate is 0.53 lb/MMBtu. The mass-based critical emission value, as calculated by the State's modeling, is 2,544 lb/hour, which is equivalent to the critical emission rate of 0.54 lb/MMBtu at the maximum rated capacity of Merrimack's two coal-fired electric generating units, MK1 and MK2.

more than the critical emission value, which may result in unsafe air quality. First, the dataset includes emissions from periods during which Merrimack Station was not subject to State permit conditions on the operation of its FGD scrubber system, and is therefore not representative of current and expected future emissions. Second, the dataset includes some emission values that are unrealistically high because they are calculated or substitute data used for purposes of determining compliance with EPA's Acid Rain Program rather than measured data used for determining emissions for compliance with the 7-day limit. Third, emission data for Merrimack Station show that the facility has rarely emitted above the critical emission rate of 0.54 lb/MMBtu since September 1, 2016, when the State's permit TP-0189 became applicable and enforceable. Fourth, the State's rate-based emission limit is designed to ensure consistent control at all load levels during operation, so an exceedance of the critical emission *rate* (in lb/MMBtu) does not necessarily mean that emissions are higher than the critical emission *value* (in lb/hour). Fifth and finally, if actual measured emissions from Merrimack Station had occurred at the levels indicated by the commenter, the facility would have violated the current 7-day emission limit, had it been in place at the time, and therefore these data are not evidence that compliance with the 7-day limit would result in a higher risk of NAAQS violations. Each of these points is discussed in greater detail below.

By reviewing the AMPD emissions data using EPA's Field Audit Checklist Tool (FACT)[5] for the period between January 1, 2012, and March 31, 2018, EPA found 227 hours with emissions above 0.54 lb/MMBtu, a number that is consistent with the "over 224 hours" identified by the commenter. In the following discussion, EPA identifies the number of hours of those 227 hours that are not appropriate to use in the analysis of the adequacy of the 7-day emission limit.

[5] Field Audit Checklist Tool (FACT) version 1.2.0.1, available for download at: www.epa.gov/airmarkets/field-audit-checklist-tool-fact. FACT provides users with metadata, including "method of determination codes" (MODC), beyond the information available using the AMPD website referenced by the Commenter.

EPA has included a spreadsheet in the docket of this action which contains the relevant data used in EPA's analysis.

(1) The FGD at Merrimack Station first became operational on September 28, 2011. Under the conditions established in the State's permit TP-0008, Merrimack Station was not permitted to operate MK2, one of its two utility boilers, unless the FGD was in operation. Merrimack Station's other utility boiler, MK1, was permitted to bypass the FGD system for no more than 840 hours per consecutive 12-month period. Both of these permit conditions became applicable and enforceable as of July 1, 2013. (This emission bypass provision is no longer permitted under the September 1, 2016 TP-0189 permit.) Prior to July 1, 2013, the facility was not subject to enforceable permit conditions requiring operation of the FGD. During 2012, Merrimack Station bypassed the FGD for emissions from MK1 on several occasions, the last of which occurred on November 7, 2012. As such, EPA does not view emissions occurring at Merrimack Station prior to July 1, 2013 as being representative of current or expected future emissions because prior to this date the relevant, enforceable permit provisions that required operation of the emission control system at Merrimack Station, as contained in permit number TP-0008, were not effective. Of the 227 hours with emissions above 0.54 lb/MMBtu, there were 188 hours that occurred prior to July 1, 2013, leaving 39 hours for further analysis.

(2) Merrimack Station is subject to emission monitoring and reporting requirements under the Acid Rain Program (40 CFR part 75). Under the Acid Rain Program, Merrimack Station must hold sufficient emission allowances to account for its SO_2 emissions. For hours in which direct, quality-assured measurements from the continuous monitoring systems (CEMS) are not available, EPA's Acid Rain Program regulations require that high emission values are calculated or substituted for the emissions that are not monitored in order to ensure that the source holds sufficient allowances to account conservatively for its emissions. *See* 40 CFR part 75 subpart D.

As described in New Hampshire's response to comments for its nonattainment area plan, the CEMS at Merrimack Station was certified on November 21, 2011 using only the low range of a dual range analyzer to measure from 0 to 300 parts per million (ppm) SO_2 of in-stack exhaust gas. When the low range was exceeded, i.e., in-stack exhaust gas exceeded 300 ppm SO_2, a calculated value of 200% of the maximum potential or uncontrolled concentration was reported to ensure that under reporting did not occur for purposes of the Acid Rain Program. As part of a periodic reassessment of the appropriate analyzer ranges, Merrimack Station retained a low range configuration and adjusted it to measure from 0 to 150 ppm on January 28, 2013. *See* section 2.1.1.5 of appendix A to 40 CFR part 75. On February 4, 2015, Merrimack Station began calibrating and quality-assuring the high range of the dual range analyzer from 150 to 2,600 ppm, while the lower range continued to be quality assured to measure between 0 and 150 ppm. In accordance with Acid Rain Program requirements, Merrimack Station was required to report calculated emissions at 200% of the maximum potential or uncontrolled concentration during the period from November 21, 2013 to February 4, 2015 when concentrations exceeded the lower range, i.e., in-stack exhaust gas exceeded 300 ppm. *See* section 2.1.1.4(f) of Appendix A to 40 CFR part 75. These hours are marked as SO_2 Method Of Determination Code (MODC) 19 in the FACT database and were reported as such in the hourly electronic emissions records. Additional CEMS outage hours that used substitute data calculated as the average of the hour before and after, reported as SO_2 MODC 06, are not measured emissions data but rather are substitute data hours. EPA concludes from the CEMS data that data points flagged as calculated or substitute data with SO_2 MODC 06 or 19 are not appropriate for use in assessing NAAQS compliance in this case because these values do not represent actual measured emissions during those hours.

Data points flagged as SO_2 MODC 06 or 19 account for 32 hours of the remaining 39 emissions data points over 0.54 lb/MMBtu, leaving seven hours for further analysis.

(3) The emission profile for Merrimack Station, since the issuance of the September 2016 permit containing the 7-day average SO_2 emissions limit, shows that exceedances of the critical emission rate, i.e., 0.54 lb/MMBtu, are infrequent. In the period from September 1, 2016, when the State's permit TP-0189 became applicable and enforceable, to March 31, 2018, Merrimack Station has emitted at a level higher than the 0.54 lb/MMBtu on three hours out of 3,109 operating hours with measured emissions data, or less than 0.1%. In addition to the SO_2 emission limit, the September 1, 2016 permit TP-0189 included a more stringent limit for the SO_2 removal efficiency of the scrubber than was included in the TP-0008 permit. In addition, TP-0189 prohibits the use of the emergency stack to bypass emissions controls except as necessary to prevent severe damage to equipment or potential injury to facility personnel. The infrequency of emissions above 0.54 lb/MMBtu since September 1, 2016 indicates that the multiple SO_2 emission control provisions contained in TP-0189, as described above, have been successful in consistently reducing emissions from Merrimack Station. Based on this evidence, EPA expects that future instances of emissions from Merrimack Station above 0.54 lb/MMBtu will continue to be extremely rare.

(4) While emissions exceeded 0.54 lb/MMBtu during each of the seven hours since July 1, 2013 (of which only three hours exceeded 0.54 lb/MMBtu since September 1, 2016, as described above), for six of these hours the total mass-based emission rate, measured in lb/hour, did not exceed the critical emission value of 2,544 lb/hour. Of those six hours, the highest emission level was 1,386.6 pounds of SO_2, well below the critical emission value, and the other emission values range from 1.1 to 843.5 pounds SO_2. Based on the State's attainment modeling demonstration, these lower emission values would not be expected to result in exceedances of

the NAAQS. That is, New Hampshire's modeling indicates that Merrimack Station could emit constantly at the mass-based emission value for each of those six hours and the area would attain the standard.

Only one hour had emissions above the critical emission value of 2,544 lb/hour. Specifically, Merrimack emitted 2,578.6 pounds of SO_2 on December 1, 2015 during the 7 a.m. hour.

EPA does not regard the single hour on December 1, 2015 at 7 a.m., during which Merrimack Station had emissions over the critical emission value, by itself as representing a serious risk for causing a violation of the NAAQS. EPA has previously acknowledged that there could possibly be hourly emission levels above the critical emission value from a source complying with a longer-term average emission limit, e.g., a 7-day limit. As stated in the proposal, an hour where emissions are above the critical emission value does not necessarily mean that a NAAQS exceedance is occurring in that hour. Similarly, an individual hour where emissions are above the level of the comparably stringent 7-day limit (0.39 lb/MMBtu in this instance) does not mean that an exceedance of the NAAQS is occurring in that hour, especially if the level of emissions is below the critical emission value. This notion also does not take into account the possible exceedances that would be expected with emissions always at the critical emission value that would otherwise be avoided because emissions are generally required to be lower (in this case, on average 27% lower). Based on this reasoning, EPA concludes that the risk of an exceedance for the one hour with emissions above the critical emission value of 2,544 lb/hour during 4.75 years of emissions from Merrimack Station (from July 1, 2013 to March 31, 2018) does not suggest that a violation of the NAAQS is likely to have occurred.

(5) Notwithstanding the explanations above regarding the appropriateness of omitting certain data points from considering NAAQS compliance, such emissions data, if they had actually been

representative of real emissions, would have caused a violation of the permit conditions for Merrimack Station, if the 7-day permit limit had been in place at the time. EPA has evaluated the Merrimack Station emissions data for the period January 1, 2012 through March 31, 2017 in accordance with the 7-day average emission rate limit, both with and without the omission of data points flagged as calculated or substitute data.

This evaluation found 27 periods during which the associated 7-day emission average would have violated the terms of the permit conditions, had those terms been in place at the time and assuming that all data points flagged as calculated or substitute data are actual emissions. Of the 27 7-day periods, 26 occurred in 2012, while the facility was still permitted to bypass the FGD system, a practice that is not permitted under the conditions of the September 2016 permit TP-0189. Even by omitting data points flagged as calculated or substitute data, none of the 7-day emission averages associated with these 26 7-day periods in 2012 would have met the 7-day emission limit, had it been in place at the time.

The one remaining 7-day period ended on December 11, 2014, and the associated 7-day emission average of 0.419 lb/MMBtu would have exceeded the emission limit of 0.39 lb/MMBtu, if data points flagged as calculated or substitute data were treated as actual emissions. By omitting the calculated or substitute data from this time period, the 7-day emission average ending on December 11, 2014 would have been 0.20 lb/MMBtu, which would comply with the 7-day limit of 0.39 lb/MMBtu, had it been in place at the time.

This finding contradicts the commenter's assertion that the "over 224" individual hours with emissions purportedly higher than the critical emission rate would not have resulted in an exceedance of the 7-day average limit. On the contrary, even if the emissions with reported emissions above the critical emission value did represent actual emissions, which EPA argues in

the previous sections is incorrect, Merrimack Station would have been out of compliance with the 7-day limit permit had it been in effect at the time.

Therefore, based on the reasoning supplied in the sections above, EPA disagrees with the commenter that emissions data from Merrimack Station demonstrate the inadequacy of the 7-day emission limit imposed by the State. Rather, the data most representative of Merrimack Station's current and expected future emissions indicate that the facility, when complying with the applicable permit restrictions, is extremely unlikely to cause a violation of the SO_2 NAAQS. The emissions data presented by the commenter are not representative of Merrimack Station's current and expected future emissions, and are therefore not appropriate for use in assessing NAAQS compliance in this case.

EPA offers the following additional discussion to further respond directly regarding the sufficiency of an appropriately-calculated, longer-term average limit, up to 30-days, with comparable stringency to a 1-hour critical emission value, to provide for attainment of the 1-hour NAAQS. EPA has conducted analyses to evaluate the extent to which longer-term average limits that have been adjusted to have comparable stringency to 1-hour limits at the critical emission value provide for attainment. In brief, while a longer-term average limit as approved in this action will allow occasions when emissions exceed the critical emission value, the use of a lower limit (i.e., as adjusted downward) compensates by requiring most values to be lower than they are required to be with a 1-hour limit at the critical emission value. EPA expects that the net result for this action will be that the comparably stringent limit will provide a sufficient constraint on the frequency and magnitude of occurrences of elevated emissions such that this control strategy based on the comparably stringent limit will reasonably provide for attainment.

As stated in appendix B of EPA's April 2014 guidance, the Agency acknowledges that even with an adjustment to provide comparable stringency, a source complying with a longer term

average emission limit could possibly have hourly emissions which occasionally exceed the critical emission value. It is important to recognize that an hour where emissions are above the critical value does not necessarily mean that a NAAQS exceedance is occurring in that hour. EPA's April 2014 guidance states that "if periods of hourly emissions above the critical emission value are a rare occurrence at a source, these periods would be unlikely to have a significant impact on air quality, insofar as they would be very unlikely to occur repeatedly at the times when the meteorology is conducive for high ambient concentrations of SO_2" (p. 24).

Exceedances of the SO_2 NAAQS occur when emissions from relevant sources are sufficiently high on occasions when the meteorology is conducive for those emissions to cause elevated SO_2 concentrations. An illustrative example would be a case in which a single source has a dominant impact on area concentrations, and the source only causes an exceedance at a particular location with light southwest winds with limited dispersion. In this example, the likelihood of an exceedance at that location will be a function of the likelihood of elevated emissions occurring during times of light southwest winds with limited dispersion. Stated more generally, the likelihood of an exceedance is a function of the likelihood of emissions being high when the meteorology is conducive for the source to cause an exceedance. By extension, the likelihood of a violation is a function of the likelihood of emissions being high on a sufficient number of times with meteorology conducive to having exceedances to have the average of the 99^{th} percentile daily maximum values exceed the NAAQS. Viewed another way, the occasions when the meteorology is conducive for the source to cause an exceedance at a particular location are likely to be infrequent, and high concentrations are contingent on both emissions being sufficiently high and the meteorology being sufficiently conducive. The NAAQS itself is based on relatively rare occurrences, being based on the 99^{th} percentile of daily maximum concentrations. Nevertheless, the point here is that the occurrence of high emissions will not

cause an exceedance if it does not occur when meteorology is conducive to having an exceedance. Furthermore, a source with rare occurrences of high emissions and with much more frequent occurrences of moderate emissions is more likely to have moderate emissions on those occasions with meteorology conducive for exceedances, and the design value for the source may be more prone to reflect the moderate emissions than the high emissions.

Thus, for a source complying with a limit using an averaging period of up to 30 days reflecting the downward adjustment generally recommended in EPA's April 2014 guidance, at issue is the likelihood that the source would have sufficiently high emissions on a sufficient fraction of the potential exceedance days to cause an SO_2 NAAQS violation. Although results will differ according to individual circumstances, EPA has presented illustrative analyses (see appendix B of EPA's April 2014 guidance) that indicate that suitably adjusted longer-term average limits can generally be expected to provide adequate confidence that the attainment plan will provide for attainment.

Therefore, based on the reasoning presented above, EPA disagrees with the commenter about the over 224 hours with emissions purported to be higher than the critical emission rate, and concludes that the longer-term limit for Merrimack Station is not expected to lead to a greater risk of a future violation of the NAAQS.

Comment 3: The commenter stated that New Hampshire's approach to develop a longer-term averaging period using an "adjustment ratio" is problematic.[6] Specifically, the commenter posits that the period of time selected by the State (i.e., July 4, 2013 through March 30, 2015) is not representative of current or expected future operations at Merrimack Station. The commenter stated that the State did not disclose the nature of data corrections provided by the Merrimack Station's owner at the time PSNH in documentation accompanying the proposed

[6] EPA terms these ratio values "adjustment factors."

permit for the facility. The commenter indicated that the nondisclosure regarding the nature of the corrections raises concerns about the accuracy of the State's analysis. For future operations, the commenter points to New Hampshire's projection of Merrimack Station's annual emissions for 2018 of 1,907 tons SO_2, which is nearly double the annual emissions total of 1,044 tons SO_2 for the facility in 2014. The commenter asserts that the time period selected for developing the adjustment factor is arbitrary and not representative of expected future operations, and that therefore the State should have selected a different time period. The commenter identified "significant spikes" in hourly emissions in the months before or after the time period selected by the State that are not included in the State's emissions database. The commenter suggested that these emission "spikes" are inappropriately excluded, and as a result the State's results are likely to be skewed. The commenter provides several alternative adjustment factors based on different time periods that include periods with emission "spikes," including an adjustment factor for each year from 2012 through 2015; the period of July 4, 2013 through March 30, 2015, used by the State in its analysis; and the 25-month period from March 1, 2013 through March 30, 2015. The alternative adjustment factors for these periods vary from 0.34 to 0.90, which would result in associated 7-day limits of between 0.19 to 0.48 lb/MMBtu. The commenter states that selecting the wrong time period for analysis can result in a more than doubling of the resulting emission rate. The commenter concludes that the methodology New Hampshire used for developing a 7-day emission rate is inadequate because the adjustment factor depends greatly on which temporal series of emissions data is examined.

Response 3: EPA analyzed the commenter's assertion regarding variability in adjustment factors based on the time period selected. An adjustment factor is a value multiplied by the 1-hour critical emission value (i.e., the maximum 1-hour emission value established to be protective of the NAAQS) to determine a downwardly adjusted longer-term average limit for an

emission unit at a level that EPA would expect to be comparably stringent to a 1-hour limit set at the critical emission value.

As stated in EPA's April 2014 guidance, we expect that establishing an appropriate longer-term average limit will involve assessing a downward adjustment in the level of the limit that would provide for comparable stringency. This assessment should generally be conducted using data obtained by CEMS, in order to have sufficient data to obtain a robust and reliable assessment of the anticipated relationship between longer-term average emissions and 1-hour emission values. This is necessary to have a suitable assessment of the warranted degree of adjustment of the longer-term average limit in order to provide comparable stringency to the 1-hour emission rate that is determined to provide for attainment. EPA generally expects that datasets reflecting hourly data for at least 3 to 5 years of stable operation (i.e., without changes that significantly alter emissions variability) would be needed to conduct a suitably reliable analysis.

For Merrimack Station, at the time that New Hampshire had conducted its analysis, only approximately 21 months of emissions data were available that were consistent with anticipated current and future operations. Specifically, the emissions units at Merrimack Station became subject to certain enforceable conditions contained in permit number TP-0008 beginning on July 1, 2013. Thus, emissions from Merrimack Station prior to July 1, 2013 are not expected to have an emissions profile consistent with the current and anticipated future emissions profile for those units. March 2015 was selected by the State as the end point of the emissions dataset because it was the last month in which data were available through AMPD at the time it conducted the analysis. During the period assessed by the State, the combined emissions from Merrimack Station's units MK1 and MK2 were always controlled by FGD and the dataset includes emissions representative of current and expected future typical operations, including startup and

shutdown events. Because the dataset includes only data from Merrimack Station while using the control technology, it is appropriate for use in developing adjustment factors for emission limits at this facility. EPA has concluded that New Hampshire used data from an appropriate time period.

Prior to deriving the adjustment factor, the State removed several data points from the AMPD dataset based on information provided by the facility. A justification for removal of these data points was included in the State's response to comments document to permit TP-0189 (included in New Hampshire's Finding of Fact document), which was also included in the State's SIP submittal. Specifically, New Hampshire justified the removal of several data points because of quality assurance issues. The State indicated in its response to comments document that substitute data was included within the AMPD dataset for hours with emissions at levels the CEMS had not been appropriately maintained and quality assured to measure. The State indicated and EPA agrees that these substitute emission data are not representative of actual emissions. According to the State's SIP submittal, the SO_2 dual span analyzer in the CEMS was adjusted as of February 4, 2015, to better characterize both lower- and higher-end emissions. In its response to comments, the State provided an hour-by-hour listing of the omitted data points, and a detailed discussion of the reasoning for these omissions. The State's Findings of Fact document is included in the docket for this action. As such, EPA notes that New Hampshire sufficiently provided its rationale and approach for removing certain data points from the AMPD dataset in the State's response to comments document. Therefore, EPA concludes that the State has appropriately disclosed the nature of the data corrections in the State's SIP submittal, and that the public has had adequate notice and opportunity to comment on the State's justification for data removal in the current rulemaking process. EPA has placed the raw data that New Hampshire used in the docket for this action, but EPA asserts that the information provided by

the State and by EPA in its proposal was adequate to clarify EPA's rationale for concurring with the State's analysis of the data.

Regarding the omission of calculated or substitute data, the calculated or substitute data points are not reliable indicators of emissions during those hours and are not appropriate for inclusion in the calculation of the adjustment factor. Based on this reasoning, EPA considers the State's omission of these values in the calculation of the adjustment factor to be appropriate.

The adjustment factor was calculated as the ratio of the 99th percentile of mass emissions for the 7-day average period to the 99th percentile of 1-hour mass emissions. For the rolling 7-day averaging period, the adjustment factor was 0.73. That is, using EPA's recommended approach for determining comparably stringent limits, the 7-day mass emission rate limit would need to be 0.73 times (or 27% lower than) the critical emission value to have stringency comparable to a 1-hour limit at the critical emission value. The State multiplied its adjustment factor of 0.73 to the critical emission rate of 0.54 lb/MMBtu to derive a comparably stringent emission rate of 0.39 lb/MMBtu. EPA has confirmed that the State appropriately implemented the recommended methodology for developing an adjustment factor based on the State's supplied dataset. EPA notes that this emission database does include hours representative of startup and shutdown conditions, as well as hours with elevated emissions or "spikes."

There were five individual alternative adjustment factors for Merrimack Station presented by the commenter as evidence that EPA's methodology (including adjustment factors) is not appropriate for developing emissions limitations based on averaging times for periods up to 30 days. Four of the five alternative adjustment factors presented by the commenter are based upon only one year of emissions data for each of the annual periods of 2012 through 2015. One of the periods presented includes emissions over a period of 25 months, specifically for the period from March 2013 through March 2015 resulting in an alternative adjustment factor of 0.47, compared

to the State's adjustment factor of 0.73 based on the 21-month time period of July 2013 through March 2015. None of the alternative adjustment factors provided by the commenter were calculated in accordance with the recommendations contained in EPA's April 2014 guidance. Specifically, EPA stated in its April 2014 guidance "that data sets reflecting hourly data for at least 3 to 5 years of stable operation (i.e., without changes that significantly alter emissions variability) would be needed to obtain a suitably reliable analysis" (p. 30). Furthermore, the alternative adjustment factors for March 2013 through March 2015 and the annual periods for 2012 and 2013 as presented by the commenter include periods of time (i.e., those prior to July 1, 2013 when FGD use was not an enforceable State permit condition) during which operations are not representative of current and expected future operations at Merrimack Station, as discussed in greater detail in our response to Comment 2 of the notice. The remaining alternative adjustment factors that do not contain periods of time prior to July 1, 2013, i.e., the annual periods for 2014 and 2015, are 0.90 and 0.70, respectively, which are reasonably consistent with the State's finding based on a larger dataset. However, the commenter's results illustrate a point that EPA considered in formulating its guidance, which is that using insufficient data, e.g., using only one year's data, is prone to yield results that vary unduly by data period and may not be a sufficiently robust basis for determining a reliable adjustment factor. The variability of these annual values demonstrates the insufficiency of the annual time period for use in development of such an adjustment factor, but does not demonstrate the insufficiency of the method contained within EPA's April 2014 guidance had it been appropriately applied, nor does it demonstrate that New Hampshire's adjustment factor is inappropriate.

EPA recognizes that the State used 21 months in its emissions variability analysis instead of the 3 to 5 years recommended for use in EPA's April 2014 guidance. As such, EPA has evaluated whether the period used by the State results in an appropriate adjustment factor.

Specifically, EPA compared the State's adjustment factor to EPA's average 30-day adjustment factor for comparable sources. Merrimack Station's FGD system employs a wet scrubber, and so EPA compared New Hampshire's adjustment factor to the average adjustment factors listed in appendix D of the April 2014 guidance for sources with wet scrubbers (derived from a database of 210 sources). For this set of sources, EPA calculated an average adjustment factor for 30-day average limits of 0.71 and an average adjustment factor for 24-hour limits of 0.89. The comparison of New Hampshire's adjustment factor of 0.73 for a 7-day limit for Merrimack Station suggests that the 21 months of data at Merrimack Station have variability that is quite similar to that of other similar facilities in the United States. Based on this comparison, EPA concludes that the State's adjustment factor is reasonable and will result in an appropriate downward adjustment from the critical emission value.

Based on the State's SIP submittal, New Hampshire's future projection of SO_2 emissions at Merrimack Station to 2018 indicates an increase of nearly 85% compared to 2014 emissions for the facility. Specifically, Tables 5-1B and 5-2B of the State's SIP submittal indicate that Merrimack Station's SO_2 emissions were 1,044 tons in 2014 and are projected to be 1,927 tons in 2018. The emission projection for 2018 includes the caveat from the State that it relies on an assumed control efficiency for the FGD of 90%, which is less efficient than the updated control efficiency of 94% for the FGD included in the State's SIP submittal. Nevertheless, this projected increase in annual emissions does not, however, indicate a different emissions profile. That is, based on available information, EPA does not expect an increase in the variability of hourly emissions due to an increase in annual emissions. In fact, the attainment demonstration included in New Hampshire's SIP submittal indicates that annual SO_2 emissions at the critical emission value, equivalent to annual emissions of 11,144 tons, is anticipated to be protective of the 2010 SO_2 NAAQS. The State's comparably stringent 7-day average limit of 0.39 lb/MMBtu equates

to total annual SO_2 emissions of 8,047 tons. Both values are above the State's 2018 projected emissions of 1,927 tons. Because New Hampshire's attainment demonstration shows that the critical emission value is protective of the NAAQS, and the State's 7-day limit is comparably stringent to the 1-hour critical emission value, EPA concludes that the State's projected 85% increase in annual SO_2 emissions from 2014 to 2018 would not result in a violation of the NAAQS.

Therefore, based on the reasoning presented above, EPA has concluded that the commenter has not demonstrated that the State developed its adjustment factor for Merrimack Station inappropriately, or that the State's 7-day limit for Merrimack Station derived using the adjustment factor is inadequate.

Comment 4: The commenter indicates that the polar receptor grid used by the State in its modeling analysis is inadequate because of the small overall number of receptors and lack of coverage over large areas of land. The commenter states that the polar grid ensures that the model will underpredict concentrations due to these "blind spots," areas where there are no receptors and which the model will overlook when the wind is blowing in their direction across the sources. Because the model is ultimately the basis for the development of the emissions limit for Merrimack Station, the commenter posits that the polar receptor grid with contiguous radial coverage gaps is improper.

Response 4: EPA agrees with the commenter that simple polar grids alone may not be appropriate for use without refinement in refined modeling analyses, though inclusion of a polar receptor grid does not in and of itself disqualify an attainment demonstration.

Receptors are points that represent physical locations at which the air dispersion models will predict ambient pollutant concentrations. Groups of Cartesian or polar receptors usually are defined as a receptor grid network or grid. The primary purpose of this network or grid is to

locate the maximum impact of concern per pollutant and averaging period. Deciding which type to use is largely a function of the type of modeling being performed (screening or refined), the size and number of emission sources, or the site location (including topography), and should be selected to provide the best "coverage" for the facility being modeled. Two types of receptors are generally employed: (1) a Cartesian receptor grid, which consists of receptors identified by their *x* (east-west) and *y* (north-south) coordinates; and (2) a polar receptor grid that consists of receptors identified by their distance and direction (angle) from a user defined origin (e.g., main boiler stack). Discrete receptors are used to identify specific locations of interest (e.g., school, community building). A modeling receptor grid may consist of any combination of discrete, polar, or Cartesian receptors, but must provide sufficient detail and resolution to identify the maximum impact.

On October 30, 2015, the State submitted preliminary modeling to EPA for the attainment demonstration for the Central New Hampshire Nonattainment Area. EPA responded on January 6, 2016, to the State's preliminary modeling submittal. In EPA's response, the Agency indicated that section 4.2.1.2(b) of the *Guideline*[7] describes the process for performing screening modeling in areas with complex terrain. As stated in our letter, in areas with complex terrain, "even relatively small changes in a receptor's location may substantially affect the predicted concentration." The *Guideline* recommended a dense array of receptors in those situations, and suggests two modeling runs: the first with "a moderate number of receptors carefully located over the area of interest," and a second with "a more dense array of receptors in areas showing potential for high concentrations, as indicated by the results of the first model run." This process is also consistent with section 7.2.2 (Critical Receptor Sites) of the *Guideline*, which states that

[7] At the time of EPA's January 6, 2016 letter to New Hampshire, the update to the *Guideline* had not yet been finalized and was not in effect. Therefore, the applicable *Guideline* was the version published on November 9, 2005 (*see* 70 FR 68218).

"selection of receptor sites should be a case-by-case determination taking into consideration the topography, the climatology, monitor sites, and the results of the initial screening procedure." In our letter to New Hampshire, EPA noted that the preliminary modeling results (i.e., those presented to the Agency on October 30, 2015) showed maximum concentrations resulting from Merrimack Station's SO_2 emissions in areas of complex terrain between 9 to 13 kilometers from Merrimack Station. EPA stated that the polar receptor grid at those distances from the source were insufficiently dense to properly characterize the extent of the impacts at locations with complex terrain. For example, at 13 kilometers from the source, the lateral distance between receptors is greater than 2 kilometers. EPA also indicated that other locations with similar terrain characteristics in the same general distance (i.e., 9-13 kilometers) from Merrimack Station did not have adequate receptor coverage. To address this issue, EPA suggested in its January 6, 2016 letter, that New Hampshire perform refined modeling consistent with its existing protocol, but with a denser array of receptors in the areas shown in the preliminary modeling to have the potential for high concentrations. Specifically, areas of complex terrain at distances within 15 kilometers of Merrimack Station, and particularly such areas to the northeast, were suggested by EPA to be modeled with high resolution receptor grids. EPA listed these areas and provided a map of these areas to the State. EPA indicated that these terrain features have the potential to be highly impacted by Merrimack Station because of their geographic characteristics and locations, but were not well characterized by the preliminary modeling due to the sparseness of the polar grid at distances beyond around 5 kilometers.

In response to EPA's January 2016, letter, the State included additional receptors in these areas for its refined modeling conducted in February 2016. Specifically, New Hampshire included 2,308 additional receptors in dense Cartesian arrays with 100-meter spatial resolution over the areas of expected maximum predicted concentrations based on preliminary modeling,

including over the areas suggested by EPA within 5-15 kilometers from Merrimack Station. After reviewing the receptor grid included by the State in its refined modeling, EPA concludes that areas of complex terrain within 15 kilometers have adequate coverage to identify potential impacts in those areas. This conclusion is consistent with the statement in section 4 (Models for Carbon Monoxide, Lead, Sulfur Dioxide, Nitrogen Dioxide and Primary Particulate Matter) of the *Guideline* (specifically section 4.2(a)) that "[i]n most cases, maximum source impacts of inert pollutants will occur within the first 10 to 20 km from the source." Furthermore, EPA's review of both the preliminary and refined modeling indicate that these areas of complex terrain are likely to include the highest impact area. Therefore, EPA finds that the modeling domain and receptor network are sufficient to identify maximum impacts from Merrimack Station, and are therefore adequate for characterizing the nonattainment area.

Comment 5: The commenter pointed out an error in Table 3-1 of the State's draft SIP submittal. Specifically, the commenter indicated that Table 3-1 incorrectly showed areas that are undesignated in New Hampshire as being designated Unclassifiable. The commenter indicated that those areas should instead be identified as undesignated.

Response 5: EPA agrees with the commenter that all areas in New Hampshire other than the Central New Hampshire Nonattainment Area were undesignated as of the date of New Hampshire's submittal (i.e., January 31, 2017). In its response to this identical comment on its proposed SIP submittal, the State indicated that Table 3-1 had been corrected. EPA has verified that the State did indeed correct the table. EPA notes that revised recommendations from New Hampshire other than those listed in Table 3-1 were received by EPA in December 2016, specifically for attainment at the New Hampshire Seacoast area and attainment/unclassifiable for all other previously undesignated areas. Furthermore, on January 9, 2018, EPA published a document of a final rule that designated all areas in New Hampshire other than the Central New

Hampshire Nonattainment Area as attainment/unclassifiable (*see* 83 FR 1098, 1143, to be codified at 40 CFR 81.330). These inconsistencies in Table 3-1 with subsequent occurrences have to do with the timing of the SIP submittal along with the December 2016 update to the State's recommendations and EPA's January 9, 2018 final designations. These inconsistencies do not affect EPA's view of whether New Hampshire has satisfied applicable nonattainment planning requirements.

Comment 6: The commenter states that the State's SIP submittal incorrectly indicates that an attainment demonstration can be made based on monitor readings alone. This idea is contrary to other statements in the State's SIP submittal, and also to EPA's April 2014 guidance, which states that monitor data alone is insufficient for an attainment demonstration, and that modeling analyses are also required. The commenter asserts that the statement should be removed from the State's SIP submittal.

Response 6: The State indicated in its response to an identical comment on its draft SIP submittal that it planned to remove the phrase "and thus may be able to demonstrate attainment for the SO_2 NAAQS" from Section 3.1.1 on page 9 of its SIP submittal. In doing so, the State would be satisfying the request made by the commenter. However, the erroneous phrase still appeared in the State's January 31, 2017 SIP submittal to EPA. EPA agrees with the commenter that the phrase is incorrect and ought not to be in the plan. EPA communicated with the State to confirm that it had intended to remove the phrase as indicated by the State's response to comments on its draft SIP submittal, and to suggest a clarification. On November 29, 2017, New Hampshire sent EPA a letter indicating that the language had been erroneously included in its January 31, 2017 submittal, and providing a corrected page 9 of the State's SIP submittal. EPA considers this amended version (i.e., the January 31, 2017, submittal as amended by the

November 29, 2017, correction on page 9) to be consistent with the State's record, as included in its response to comments.

Comment 7: The commenter identifies an error in Table 5-1B of the State's draft SIP submittal. Specifically, the commenter indicates that the table erroneously states that the total estimated emissions for the Central New Hampshire Nonattainment Area for 2014 was 22,947 tons of SO_2. The commenter further states that the proper total for 2014 emissions should be 1,480 tons of SO_2. The commenter indicates that the figure is assumed to be an error that should be corrected.

Response 7: EPA agrees with the commenter that the total 2014 emissions within the Central New Hampshire Nonattainment Area should be 1,480 tons SO_2. The commenter had supplied an identical comment on New Hampshire's draft SIP submittal, and the State's response to comment document included in its final SIP submittal stated that the error would be corrected. As indicated by the State in its response to comments, Table 5-1B shows the corrected value. As such, EPA considers this comment to have been already addressed by the State.

Comment 8: In the incorporated comments dated July 15, 2016, the commenter states that New Hampshire is long overdue for finalizing a plan to ensure attainment and maintenance of the SO_2 NAAQS. The commenter goes on to state that the (then) proposed permit is apparently only a step towards developing such a SIP. The commenter concludes by urging the State to swiftly address the issues identified in its comments on the proposed permit for Merrimack Station.

Response 8: There are two plausible interpretations of this comment. The first interpretation is procedural. Interpreted in this fashion, the commenter would be requesting that the permitting authority expedite the permitting for Merrimack Station, which would be a critical component of the anticipated attainment plan for the area around Merrimack Station. Interpreted this first way,

the comment is addressed through the current action, which is the final step in the procedure for approving an attainment plan for the area. A second interpretation implies technical insufficiency. Interpreted in this fashion, the commenter would be indicating that the proposed permit, when finalized, would be just one of multiple required actions necessary to ensure attainment in the nonattainment area. Interpreted this second way, the comment rests on the previous arguments provided by the commenter suggesting that the State's proposed plan does not ensure attainment of the NAAQS. On these grounds, EPA disagrees with the commenter that the proposed nonattainment area plan may be insufficient to ensure attainment. EPA has provided ample discussion and evidence, in both the current response to comments and the September 28, 2017 proposal, for why the State's nonattainment plan and SO_2 attainment demonstration are sufficient.

III. Final Action

EPA has determined that New Hampshire's SO_2 nonattainment plan meets the applicable requirements of sections 110, 172, 191, and 192 of the CAA. EPA is approving New Hampshire's January 31, 2017 SIP submission, as amended by the State on November 29, 2017, for attaining the 2010 primary 1-hour SO_2 NAAQS for the Central New Hampshire Nonattainment Area and for meeting other nonattainment area planning requirements. This SO_2 nonattainment plan includes New Hampshire's attainment demonstration for the SO_2 nonattainment area. The nonattainment area plan also addresses requirements for RFP, RACT/RACM, enforceable emission limits and control measures, base-year and projection-year emission inventories, and contingency measures.

In New Hampshire's SIP submittal to EPA, New Hampshire included the applicable monitoring, testing, recordkeeping, and reporting requirements contained in Merrimack Station's permit, TP-0189, to demonstrate how compliance with Merrimack Station's SO_2 emission limit

will be achieved and determined. EPA is approving into the New Hampshire SIP the provisions of Merrimack Station's permit, TP-0189, that constitute the SO_2 operating and emission limits and their associated monitoring, testing, recordkeeping, and reporting requirements. EPA is approving these provisions into the State's SIP through incorporation by reference, as described in section IV., below.

EPA is not removing the portion of the New Hampshire SIP entitled "EPA-approved State Source specific requirements" as it pertains to Merrimack Station's July 2011 permit, TP-0008, because EPA did not receive a request from the State to do so. *See* 40 CFR 52.1520(d). However, EPA considers those provisions to be superseded by the conditions of TP-0189, which are more stringent, and which are being incorporated into the SIP in this final action. Specifically, two of the provisions, items 6 and 8 from Table 4, relate to SO_2 emissions limits that have been superseded by Merrimack Station's September 2016 permit, TP-0189. Item 10 from Table 4 has also been superseded by Merrimack Station's September 2016 permit, TP-0189, in that the existing SIP provision allowed operation of one of Merrimack Station's two boilers, MK1, for up to 840 hours in any consecutive 12-month period through the emergency bypass stack, i.e., not through the FGD system. Each of the corresponding provisions of Merrimack Station's September 2016 permit, TP-0189, are more stringent than those existing SIP provisions. The limits EPA is approving into New Hampshire's SIP in this action do not exempt any hours from being subject to the limit.

IV. Incorporation by Reference

In this rule, EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is finalizing the incorporation by reference of certain federally enforceable provisions of Merrimack Station's permit, TP-0189, effective on September 1, 2016, described in the amendments to 40 CFR part 52 set forth below.

Specifically, the following provisions of that permit are incorporated by reference: items 1, 2, and 3 in Table 4 ("Operating and Emission Limits"); items 1 and 2 in Table 5 ("Monitoring and Testing Requirements"); items 1 and 2 in Table 6 ("Recordkeeping Requirements"); and items 1 and 2 in Table 7 ("Reporting Requirements"). EPA has made, and will continue to make, relevant documents, including the portions of TP-0189 being incorporated by reference, generally available through www.regulations.gov.

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq*., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days

after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **Insert date 60 days after date of publication in the Federal Register]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: May 23, 2018.

Alexandra Dunn,
Regional Administrator,
EPA New England.

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart EE—New Hampshire

2. Section 52.1520 is amended:

a. In the table in paragraph (d) by:

i. Revising the entry for "PSNH Merrimack Station"; and

ii. Adding the entry for "PSNH d/b/a Eversource Energy Merrimack Station," at the end of the table; and

b. In the table in paragraph (e), by adding an entry for "Central New Hampshire Nonattainment Area Plan for the 2010 Primary 1-Hour Sulfur Dioxide NAAQS" at the end of the table.

The revision and additions read as follows:

§ 52.1520 Identification of plan.

* * * * *

(d) * * *

EPA-APPROVED NEW HAMPSHIRE SOURCE SPECIFIC REQUIREMENTS

Name of source	Permit No.	State effective date	EPA approval date [2]	Additional explanations/§52.1535 citation
**	*	*	*	**
PSNH Merrimack Station	TP-0008	7/8/2011	8/22/2012, 77 FR 50602	Flue Gas Desulfurization System. Portions of this permit have been superseded by TP-0189 for PSNH d/b/a Eversource Energy Merrimack Station.
**	*	*	*	**

PSNH d/b/a Eversource Energy Merrimack Station	TP-0189	9/1/2016	**[Insert date of publication date in the Federal Register], [Insert Federal Register citation]**	Items 1, 2, and 3 in Table 4 "Operating and Emission Limits"; items 1 and 2 in Table 5 "Monitoring and Testing Requirements"; items 1 and 2 in Table 6 "Recordkeeping Requirements"; items 1 and 2 in Table 7 "Reporting Requirements"

[2] In order to determine the EPA effective date for a specific provision listed in this table, consult the **Federal Register** notice cited in this column for the particular provision.

(e) * * *

NEW HAMPSHIRE NONREGULATORY

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approved date [3]	Explanations
**	*	*	*	**
Central New Hampshire Nonattainment Area Plan for the 2010 Primary 1-Hour Sulfur Dioxide NAAQS	Central New Hampshire SO_2 Nonattainment Area	1/31/2017	**[Insert date of publication date in the Federal Register]** **[Insert <u>Federal Register</u> citation]**	

[3] In order to determine the EPA effective date for a specific provision listed in this table, consult the **Federal Register** notice cited in this column for the particular provision.

[FR Doc. 2018-11597 Filed: 6/4/2018 8:45 am; Publication Date: 6/5/2018]