than 5 minutes using Method 6c (the instrumental analyzer procedure) in Appendix A of 40 CFR part 60 or by using a CEM. However, EPA believes that in many instances 5-minute releases of SO₂ that would cause exceedances of a 5-minute NAAQS or trigger level will occur at unpredictable times or as fugitive emissions (i.e., not through a stack), making stack tests an impractical compliance method. Nor may sampling fuel at 5-minute intervals be a practicable alternative as in the case of coal in which sulfur content may not be homogeneous. In addition, the source of the emission may not be due to combustion of fossil fuel but to chemical process emissions.

The EPA believes that in most instances, in order to attain a 5-minute NAAQS or trigger level, the State will not be able to rely on measurable emission limits but instead on actions by the source to, for example, modify equipment or process or to have improved maintenance that will address the emission releases that are causing 5minute exceedances. Because of these potential limitations to determining compliance of emission limits designed to protect a 5-minute NAAQS or trigger level, compliance will in most instances need to consist of the State ensuring that the source has implemented the necessary remedies. Verification that actions have been effective will require that ambient air monitoring continue for a reasonable period, e.g., another 2 years following the corrective action. However, in those instances where emissions can be feasibly measured on a 5-minute basis or it is determined that fuel sampling is a feasible compliance indicator, the State may elect to set an emission limit and use emission measurement or fuel sampling as the method for determining compliance.

2. Malfunction Policy

As stated previously, EPA has on occasions used its enforcement discretion in determining how and whether to act on unavoidable violations of source emission limits during periods of startup, shutdown and malfunction (40 CFR 60.11(d)). This policy recognizes that during startup and shutdown conditions, effective pollutant control may sometimes not be technically feasible due to process temperatures and pressures that have not yet stabilized. The policy also recognizes that certain source malfunctions are not reasonably foreseeable and are unavoidable, which result in uncontrolled emissions to the atmosphere. Clearly, in many cases, forces of nature such as floods, tornadoes and lightning strikes can

overwhelm a source's ability to function in a normal fashion and may produce conditions that preclude proper operation of sources or control equipment. However, some conditions may be reasonably anticipated and proper design of equipment can ameliorate their effects (e.g., grounding of equipment for lightning protection, observation of flood plains, etc). It is possible in some cases to address this through design of redundant control systems to guard against the release of uncontrolled emissions to the atmosphere should one system suffer a malfunction; however, the cost may be prohibitive and such systems are not uniformly required. Some SO₂ control systems offer this protection, such as dual acid plants operated in parallel at petroleum refineries. Should one plant experience operational problems in such cases, the other is available to provide a continued partial level of sulfur (and ultimately SO₂) removal.

3. Conclusion

As is currently done, where there have been monitored violations of the 24-hour, 3-hour, or 5-minute SO₂ NAAQS or trigger level, the State shall be required to determine the source of the SO₂ emissions and investigate the cause of the emissions at that source. Where the results of these investigations demonstrate that improper operation and maintenance practices and/or poor control equipment design are primarily responsible for release of uncontrolled emissions to the atmosphere, the State shall be expected to work with the source to take appropriate actions to reduce inadequately controlled source emissions.

For purposes of verifying the results of any corrective actions taken and compliance, the EPA intends to rely on continued ambient air monitoring. The EPA also anticipates the need to review the implementation of its malfunctions policy in light of the concerns discussed in this document with the possible result of more stringent showings required to justify the conclusion that malfunctions are truly unavoidable. Recordkeeping based on earlier baseline assessments of the problem at the source should be maintained at the source to assist in evaluations should further exceedances be monitored.

III. Requirements Associated With Retention of Existing NAAQS

The State is not required to revise its SIP to address 5-minute, high concentrations of SO_2 if the existing NAAQS is retained. However, in concert with changes in monitoring requirements for part 58 proposed in

this document, as discussed above, EPA is proposing to require States to implement a targeting strategy to more aggressively monitor process sources that are likely producing high concentrations of SO2 even if for short periods of time. As described previously, the targeted strategy will be implemented through the annual SLAMS network review during which the States will report on progress made the previous year. The EPA believes that the results of such a targeting strategy will reduce the possibility and frequency of 5-minute highconcentration SO₂ exposures as an incident to more effectively monitoring peak SO₂ concentrations and by bringing into compliance those sources violating the existing NAAQS. However, EPA acknowledges that there may be occurrences of SO₂ releases which could exceed the 5-minute NAAQS or section 303 trigger level proposed in the part 50/53 document and not exceed the current SO₂ NAAQS. In those cases, the State should, nevertheless, conduct compliance inspections in the eventuality that the source is out of compliance with current SIP requirements. Beyond these measures, EPA would not have authority to take further actions under the title I SIP program.

If violations of the current NAAQS cannot be resolved through compliance and enforcement (i.e., the source is in compliance), then the State will be expected to take steps to reduce emissions on its own initiative by revising the emission limit, by requiring process modifications, or other control measures. The State shall then prepare a SIP revision for EPA approval in order to make the emission reductions federally enforceable. In the event that a State does not take these steps, then EPA can take either of two actions: (1) If the area is currently designated attainment, using the authority under section 107(d) to redesignate the area nonattainment; and/or (2) issuing a SIP call under section 110(k)(5) of the Act to notify the Governor of the State that the SIP is inadequate to attain and maintain the SO₂ NAAQS and to call for a SIP revision as necessary to correct such inadequacies.

There are advantages and disadvantages in using either the nonattainment redesignation or SIP call approach. For instance, the nonattainment redesignation process, in addition to requiring expeditious attainment of the standard, imposes the requirements applicable under part D, title I, of the Act (e.g., reasonably available control measures (RACM), reasonable further progress (RFP),