

(F) The only participation in a toxic exposure risk activity that is established is based on an entry in an exposure tracking record system, as defined in § 3.1(cc), that does not corroborate a veteran's potential exposure to toxic substances, chemicals, or airborne hazards during military service.

(G) The only participation in a toxic exposure risk activity that is established is based on an entry in an exposure tracking record system, as defined in § 3.1(cc), that is based on the veteran's report of exposure to toxic substances, chemicals, or airborne hazards that cannot be substantiated.

* * * * *

■ 4. Amend § 3.317 by revising the section heading and paragraphs (a)(1), (c)(3)(ii), and (e)(1) to read as follows:

§ 3.317 Presumption of service connection for certain undiagnosed illnesses and medically unexplained chronic multi-symptom illnesses occurring in Persian Gulf veterans.

(a) * * *

(1) Except as provided in paragraph (a)(7) of this section, VA will pay compensation in accordance with 38 U.S.C. chapter 11, to a Persian Gulf veteran who exhibits objective indications of a qualifying chronic disability that became manifest to any degree at any time, provided that such disability, by history, physical examination, and laboratory tests, cannot be attributed to any known clinical diagnosis.

* * * * *

(c) * * *

(3) * * *

(ii) For purposes of this paragraph (c), the term *qualifying period of service* means service in the Southwest Asia theater of operations during the Gulf War or a period of active military, naval, or air service on or after September 19, 2001, in Afghanistan.

* * * * *

(e) *Service*. For purposes of this section:

(1) The term *Persian Gulf veteran* means a veteran who served on active military, naval, or air service in the Southwest Asia theater of operations, Afghanistan, Israel, Egypt, Turkey, Syria, or Jordan, during the Persian Gulf War.

* * * * *

■ 5. Revise § 3.320 to read as follows:

§ 3.320 Presumptive service connection based on exposure to toxic substances, chemicals, and airborne hazards.

(a) *Presumption of exposure*. A covered veteran as defined in paragraph (c) of this section, and required by 38 U.S.C. 1119(b), shall be presumed to

have been exposed to the following toxic substances, chemicals, and airborne hazards during such service, unless there is affirmative evidence to establish that the veteran was not exposed to any such toxic substances, chemicals, and airborne hazards during that service.

(1) Fine particulate matter.

(2) [Reserved]

(b) *Presumption of service connection*.

Except as provided in paragraph (d) of this section, the following diseases becoming manifest in a covered veteran, as defined in paragraph (c) of this section, shall be considered to have been incurred in or aggravated during active military, naval, air, or space service, notwithstanding that there is no record of evidence of such disease during the period of such service.

(1) Asthma.

(2) Head cancer of any type.

(3) Neck cancer of any type.

(4) Respiratory cancer of any type.

(5) Gastrointestinal cancer of any type.

(6) Reproductive cancer of any type.

(7) Lymphoma cancer of any type.

(8) Kidney cancer.

(9) Brain cancer.

(10) Melanoma.

(11) Pancreatic cancer.

(12) Chronic bronchitis.

(13) Chronic obstructive pulmonary disease.

(14) Constrictive bronchiolitis or obliterative bronchiolitis.

(15) Emphysema.

(16) Granulomatous disease.

(17) Interstitial lung disease.

(18) Pleuritis.

(19) Pulmonary fibrosis.

(20) Sarcoidosis.

(21) Chronic sinusitis.

(22) Chronic rhinitis.

(23) Glioblastoma.

(c) *Covered veteran*. For purposes of this section, the term covered veteran means any veteran who:

(1) On or after August 2, 1990, performed active military, naval, air, or space service while assigned to a duty station in, including airspace above:

(i) The Southwest Asia theater of operations as defined in § 3.317(e)(2); or

(ii) Somalia; or

(2) On or after September 11, 2001, performed active military, naval, air, or space service while assigned to a duty station in, including airspace above:

(i) Afghanistan;

(ii) Djibouti;

(iii) Egypt;

(iv) Jordan;

(v) Lebanon;

(vi) Syria;

(vii) Yemen; or

(viii) Uzbekistan.

(d) *Exceptions*. A disease listed in paragraph (b) of this section shall not be presumed service connected if there is affirmative evidence that:

(1) The disease was not incurred or aggravated during active military, naval, air, or space service; or

(2) The disease was caused by a supervening condition or event that occurred between the veteran's most recent departure from active military, naval, air, or space service and the onset of the disease; or

(3) The disease is the result of the veteran's own willful misconduct.

(e) *Special applicability date provision*. The Secretary has determined that all veterans presenting a claim for disability compensation for which service connection could be established based on the presumptions in section 406 of Public Law 117-168 are "capable of demonstrating other sufficient cause," entitling those veterans to an applicability date for the presumptions concurrent with the date of enactment of Public Law 117-168.

(Authority: 38 U.S.C. 501, 1119, 1120)

[FR Doc. 2024-21852 Filed 9-30-24; 8:45 am]

BILLING CODE 8320-01-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R02-OAR-2024-0083; FRL-11767-01-R2]

Finding of Failure To Attain the Primary 2010 1-Hour Sulfur Dioxide Standard for the San Juan and Guayama-Salinas Nonattainment Areas; Approval and Conditional Approval of Air Quality State Implementation Plans; Puerto Rico; Attainment Plan for the 2010 1-Hour Sulfur Dioxide Standard for the San Juan and Guayama-Salinas Nonattainment Areas

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing two actions related to attainment of the 2010 primary 1-hour sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS or "standard"). First, the EPA is proposing to determine that the San Juan and Guayama-Salinas SO₂ Nonattainment Areas (NAAs) failed to attain the 2010 primary 1-hour SO₂ NAAQS by the applicable attainment date of April 9, 2023, based upon a technical analysis of various evidence

available (*i.e.*, weight-of-evidence analysis). If the EPA finalizes this determination as proposed, within one year, Puerto Rico will be required to submit revisions to the Puerto Rico State Implementation Plan (SIP) that, among other elements, provide for expeditious attainment of the 2010 SO₂ standard no later than five years from the publication date of the final rule. Second, the EPA is proposing to approve certain elements of Puerto Rico's November 22, 2022, SIP revision (hereinafter referred to as the "plan"), which was submitted to demonstrate attainment of the 2010 primary 1-hour SO₂ standard in the San Juan and Guayama-Salinas NAAs. Elements being proposed for approval include Puerto Rico's nonattainment new source review (NNSR) program and the base year emissions inventory. Finally, the EPA is proposing to approve in part, and conditionally approve in part, for SIP-strengthening purposes, other remaining elements of the plan, including amendments to Puerto Rico's Regulation for the Control of Atmospheric Pollution (or RCAP), which include control measures, emissions limitations, and reporting requirements for sources in the NAAs.

DATES:

Comments: Written comments must be received on or before December 2, 2024.

Public Information Sessions: The EPA will hold two public information sessions on this proposed rulemaking in Puerto Rico on dates and locations to be determined and announced at a later date.

For more information on the public information sessions, see

SUPPLEMENTARY INFORMATION.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R02-OAR-2024-0083 at <https://www.regulations.gov>. Although listed in the index, some information is not publicly available, *e.g.*, Controlled Unclassified Information (CUI) (formally referred to as Confidential Business Information (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 electronically through <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information

you consider to be CUI or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CUI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. 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. The files will also be made available by appointment for public inspection between the hours of 9:00 a.m. and 4:30 p.m. weekdays except for legal holidays. Contact the person(s) listed in the **FOR FURTHER INFORMATION CONTACT** paragraph below to make an appointment. If possible, please make the appointment at least two working days in advance of your visit. We may charge you a reasonable fee for copying parts of the docket.

FOR FURTHER INFORMATION CONTACT:

Nicholas Ferreira, Environmental Protection Agency, Region 2, Air Programs Branch, 290 Broadway, New York, New York 10007-1866, at (212) 637-3127, or by email at ferreira.nicholas@epa.gov, and/or Andres Febres, Environmental Protection Agency, Region 2, Caribbean Environmental Protection Division Office, City View Plaza II, #48 RD. 165 km 1.2, Guaynabo, Puerto Rico, 00968-8069, at (787) 977-5801, or by email at febres-martinez.andres@epa.gov.

SUPPLEMENTARY INFORMATION:

Public Information Session

The EPA intends to provide two public information sessions concerning this proposed rule. The EPA will announce the date, time, and location for each session on its website. These public information sessions will provide informal opportunities for members of the public to learn about this proposed action. The EPA anticipates these

sessions will allow the public to be better informed when submitting formal comments during the 60-day comment period for this proposed action.

A translator will be present at the public engagement sessions to ensure participants are able to understand the information provided by the EPA. There will be no recording or transcript of these public information sessions since these sessions are not considered to be formal public hearings. Statements made and/or questions asked at these sessions will not be considered formal comments on the proposed rule and will not be included in the EPA's response to comments, unless submitted as a formal comment on the record.

Members of the public who wish to formally comment should do so during the 60-day public comment period provided following the publication of this proposed rule.

This notice is organized as follows:

Table of Contents

- I. Background
 - A. The 2010 SO₂ NAAQS
 - B. Designations and Attainment Date Requirements for the 2010 SO₂ NAAQS
 - C. Finding of Failure To Submit and SIP Submittal
 - D. Puerto Rico's Integrated Resource Plan
- II. What is the EPA proposing?
- III. Proposed Determination of Failure To Attain and the Associated Consequences
 - A. Applicable Statutory and Regulatory Provisions
 - B. San Juan and Guayama-Salinas SO₂ Monitoring Networks and Considerations
 - C. SO₂ Data Considerations and the EPA's Proposed Determination
 1. SO₂ Monitor Data
 2. Modeling Data and Control Strategy Timeline
 3. Failure To Implement the Control Strategy
 4. SO₂ Emissions Data
 5. Weight-of-Evidence Analysis Conclusions and the EPA's Proposed Determination
 - D. Consequences for SO₂ NAAs Failing To Attain Standards by Attainment Dates
- IV. Requirements for SO₂ Nonattainment Area Plans
- V. Review of Modeled Attainment Demonstration
 - A. Modeling Approach
 - B. Area of Analysis
 - C. Receptor Grid
 - D. Meteorological Data
 - E. Source Characterization
 - F. Emissions Data
 - G. Retirements and Emission Limits
 - H. Background Concentrations
 - I. Summary of Results
- VI. Review of Other Plan Requirements
 - A. Emissions Inventory
 - B. RACM and RACT and Enforceable Emission Limitations and Control Measures
 - C. New Source Review
 - D. Reasonable Further Progress

- E. Contingency Measures
- F. Conformity
- VII. Puerto Rico's New Source Review Program
- VIII. The EPA's Evaluation of Rule 425
- IX. Environmental Justice Considerations
- X. The EPA's Proposed Action
- XI. Incorporation by Reference
- XII. Statutory and Executive Order Reviews

I. Background

A. The 2010 SO₂ NAAQS

Under section 109 of the Clean Air Act (CAA), the EPA has established primary and secondary NAAQS for certain pervasive air pollutants (referred to as "criteria pollutants") and conducts periodic reviews of the NAAQS to determine whether they should be revised or whether new NAAQS should be established. The primary NAAQS represent ambient air quality standards the attainment and maintenance of which the EPA has determined, including a margin of safety, are requisite to protect the public health. The secondary NAAQS represent ambient air quality standards the attainment and maintenance of which the EPA has determined are requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.

Under the CAA, the EPA must establish NAAQS for criteria pollutants, including SO₂. SO₂ is primarily released to the atmosphere through the burning of fossil fuels by power plants and other industrial facilities. Short-term exposure to SO₂ can damage the human respiratory system and increase breathing difficulties. Small children and people with respiratory conditions, such as asthma, are more sensitive to the effects of SO₂. Sulfur oxides at high concentrations in ambient air can also react with compounds to form small particulates that can penetrate deeply into the lungs and cause health problems.

The EPA first established primary SO₂ standards in 1971 at 0.14 parts per million (ppm) over a 24-hour averaging period and 0.3 ppm over an annual averaging period.¹ On June 22, 2010, the EPA revised the primary NAAQS for SO₂ and published a new 1-hour primary SO₂ NAAQS of 75 parts per billion (ppb).² The intent of this revision is to provide increased protection of public health, providing for revocation of the 1971 primary annual and 24-hour SO₂ standards for

most areas of the country following area designations under the new NAAQS.

The 2010 standard is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations does not exceed 75 ppb, or 0.075 ppm, as determined in accordance with Appendix T of 40 CFR part 50.17. The EPA established the SO₂ NAAQS based on significant evidence and numerous studies demonstrating that serious health effects are associated with short-term exposures to SO₂ emissions ranging from five minutes to 24 hours, including an array of adverse respiratory effects such as narrowing of the airways, which can cause difficulty breathing (bronchoconstriction) and increased asthma symptoms. For more information regarding the health impacts of SO₂, please refer to the June 22, 2010 final rulemaking. *See* 75 FR 35520, codified at 40 CFR 50.17.

B. Designations and Attainment Date Requirements for the 2010 SO₂ NAAQS

Following promulgation of a new or revised NAAQS, the EPA is required by the CAA to designate areas throughout the United States as attaining or not attaining the NAAQS; this designation process is described in section 107(d)(1)–(2) of the CAA. For the 2010 SO₂ NAAQS, the EPA defined a nonattainment area (NAA) as an area that the EPA determined violates the 2010 1-hour primary SO₂ NAAQS and/or contributes to a violation in a nearby area, based on the most recent 3 years of air quality monitoring data, appropriate dispersion modeling analysis, and any other relevant information.³

On January 9, 2018, the EPA, as part of the third round⁴ of area designations for the 2010 1-hour primary SO₂ NAAQS, designated six areas of the country as nonattainment, including the San Juan and Guayama-Salinas NAAs.⁵ These area designations had an effective date of April 9, 2018.

Areas designated nonattainment for the SO₂ NAAQS are subject to the general NAA planning requirements of CAA section 172 and to the SO₂-specific

planning requirements of subpart 5 of part D of Title I of the CAA (sections 191 and 192). All components of the SO₂ part D nonattainment area SIP, including the emissions inventory, attainment demonstration, reasonably available control measures (RACM) and reasonably available control technology (RACT), enforceable emissions limitations and control measures, Reasonable Further Progress (RFP) plan, nonattainment New Source Review (NNSR) program, and contingency measures, are due to the EPA within 18 months of the effective date of designation of a nonattainment area under CAA section 191.

Therefore, the nonattainment area SIPs for areas designated effective April 9, 2018, were due on October 9, 2019. These SIPs are required to demonstrate that their respective areas will attain the 2010 1-hour primary SO₂ NAAQS as expeditiously as practicable, but no later than five years from the effective date of designation, or by April 9, 2023, for the San Juan and Guayama-Salinas NAAs.

C. Finding of Failure To Submit and SIP Submittal

For a number of SO₂ NAAs, including the San Juan and Guayama-Salinas NAAs, the EPA published an action on November 3, 2020, effective December 3, 2020, finding that Puerto Rico and other pertinent states had failed to submit the required SO₂ nonattainment plan by the submittal deadline. *See* 85 FR 69504. This finding initiated a deadline under CAA section 179(a) for the potential imposition of two sanctions clocks related to new source review offsets (*i.e.*, "2-to-1 offsets") and highway funding, within 18 and 24 months of the findings, respectively, unless the states and territories subject to the finding made the necessary complete SIP submittal. Additionally, this finding initiated a deadline under CAA section 110(c) for the EPA to promulgate a Federal Implementation Plan (FIP) within two years of the finding unless, by that time, the EPA had approved the submittal as meeting applicable requirements.

On June 3, 2022, the 2-to-1 offset sanctions took effect within the Puerto Rico NAAs. Before the highway funding sanctions could go into effect within the NAAs on December 3, 2022, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) submitted a nonattainment plan for the San Juan and Guayama-Salinas NAAs (*i.e.*, San Juan and Guayama-Salinas SO₂ plan) on November 22, 2022, and the EPA deemed the PRDNER's submittal administratively and technically complete on December 2, 2022. As a

¹ *See* 36 FR 8186 (April 30, 1971).

² *See* 75 FR 35520 (June 22, 2010), codified at 40 CFR 50.17(a)–(b).

³ *See* 83 FR 1101 (Jan. 9, 2018).

⁴ 83 FR 1098 (Jan. 9, 2018), codified at 40 CFR part 81, subpart C.

⁵ The EPA completed its first round of initial area designations for the 2010 1-hour primary SO₂ NAAQS effective October 4, 2013. *See* 78 FR 47191 (Aug. 5, 2013). A second round of designations was effective September 12, 2016, with a supplement effective January 17, 2017. *See* 81 FR 45039 (July 12, 2016) and 81 FR 89870 (Dec. 13, 2016), respectively. A fourth round of designations was effective April 30, 2021. *See* 86 FR 16055 (Mar. 26, 2021).

result of the EPA's determination, the 2-to-1 offset sanctions clock was stopped and the highway sanctions never took effect, per the EPA's sanctions regulations at 40 CFR 52.31; however, this completeness determination did not terminate the EPA's FIP obligation that was triggered by the EPA's November 3, 2020, Finding of Failure to Submit.

Within the San Juan and Guayama-Salinas SO₂ plan, amendments to Puerto Rico's RCAP were submitted for the EPA's approval. The RCAP amendments incorporate the SO₂ control measures and nonattainment provisions of the SO₂ plan and would become federally enforceable upon final approval by the EPA. The RCAP amendments consist of revisions to Rule 102, "Definitions," as well as the adoption of Rule 210, "Non-Attainment Provisions," and Rule 425, "Provisions for SO₂ Non-Attainment Areas."⁶ The PRDNER's permitting requirements to construct new sources or modify major sources of emissions of SO₂ and other pollutants in NAAs, including the San Juan and Guayama-Salinas NAAs, are set forth in the revisions to Rule 102, "Definitions," and the recently adopted Rule 210, "Nonattainment Provisions." Finally, the recently promulgated Rule 425 was adopted to include control measures, emission limits, test methods and procedures, reporting and recordkeeping requirements, and contingency measures for the San Juan and Guayama-Salinas NAAs.

D. Puerto Rico's Integrated Resource Plan

The compliance strategy for Puerto Rico's SIP, and the accompanying RCAP amendments, were developed based on the most recent Integrated Resource Plan (IRP) approved by the Puerto Rico Energy Bureau (PREB),⁷ as well as additional updates provided by the PREB, which considered emission unit retirements within the San Juan and Guayama-Salinas NAAs following the integration of renewable energy sources.

The IRP is a plan that is required under Puerto Rico law, with the purpose of providing cost-effective electrical power to meet Puerto Rico's energy demand over a twenty-year planning period, while considering energy conservation, resiliency, reliability,

efficiency, transparency, and the environment. Under Act 57–2014,⁸ a Puerto Rico law known as the Puerto Rico Energy Transformation and RELIEF Act, the Puerto Rico Electric Power Authority (PREPA), or the electric utility responsible for the operation of the electric power transmission and distribution system (currently LUMA Energy), is required to prepare an IRP for the PREB's approval, which considers reasonable resources to satisfy energy demand for up to a twenty-year period. Puerto Rico's electric utility is also responsible for updating the plan at least every three years to reflect changes in energy market conditions, regulations, fuel prices, and capital costs. Pursuant to Act 57–2014, the PREB is responsible for establishing and implementing regulations to ensure the capacity, reliability, safety, and efficiency of Puerto Rico's electrical system. This includes evaluating and approving the IRP, overseeing and ensuring compliance, and implementation.

On August 24, 2020, the PREB issued the IRP Final Order, based on the IRP submitted by PREPA. The Approved IRP included a Modified Preferred Resource Plan (Action Plan) considering specific power generation capacity additions and retirements. In the Approved IRP, the PREB established a schedule for minimum quantities of renewable resources, and battery energy storage resources to be procured through the Requests for Proposals processes, to be completed by June 2023. The Approved IRP also directed PREPA to submit a renewable resource and battery energy storage procurement plan. Specifically, the Approved IRP included a program for six tranches of procurement for renewable energy and battery storage resources that would add 3,750 MW of renewable sources to the energy grid. Based on the procurement of renewable resources to be integrated in the Puerto Rico Electric System, the Approved IRP authorized the retirement of PREPA's older, oil-fired steam resources, combined cycle turbines and peaking units for the period between 2021 and 2025.

The PREB provided an updated schedule for emission unit retirements and the integration of new renewable energy and battery storage resources via letter to the PRDNER on October 18, 2022, which was updated on November 15, 2022.⁹ The IRP was scheduled to be

revised and submitted to the PREB by June 28, 2024 by LUMA, the current operator of Puerto Rico's electrical power transmission and distribution system.¹⁰ However, on June 7, 2024, LUMA requested that the PREB suspend the June 28 deadline, due to modeling delays associated with its base case scenario.¹¹ LUMA requested that the 2024 IRP be filed on May 16, 2025, with an analysis of four supplemental scenarios proposed to be filed on June 19, 2025.¹² On August 20, 2024, the PREB denied LUMA's request for an extension, until May 16, 2025, for a full IRP.

The PREB ordered LUMA to file the Preferred Resource Plan and "salient components" of the base case and alternative case scenarios by no later than November 29, 2024, and ordered LUMA to file certain transmission and distribution related requirements by no later than February 28, 2025.¹³

II. What is the EPA proposing?

The EPA is proposing several actions in this rulemaking. First, under CAA section 179(c), the EPA is proposing to determine that the San Juan and Guayama-Salinas SO₂ NAAs failed to attain the 2010 1-hour primary SO₂ standard by the statutory attainment date of April 9, 2023. The EPA's proposed Finding of Failure to Attain (FFA) determination is based on a weight-of-evidence analysis that demonstrates that the San Juan and Guayama-Salinas areas failed to attain the standard by the mandatory attainment date. The EPA's reasoning for this decision is described in Section III of the preamble.

Second, the EPA is proposing to approve certain elements of Puerto Rico's SO₂ plan, which was submitted to demonstrate how the San Juan and Guayama-Salinas areas would meet the 2010 1-hour SO₂ standard in the San Juan and Guayama-Salinas NAAs. The

¹⁰ On June 22, 2020, LUMA entered into an operation and maintenance agreement under which it will operate the transmission and distribution system previously operated by PREPA. PREPA maintains ownership over the transmission and distribution system. See <https://www.p3.pr.gov/wp-content/uploads/2020/06/executed-consolidated-om-agreement-td.pdf>.

¹¹ See LUMA's Motion in Compliance with Resolution and Order of June 18, 2024, and Submitting Second Revised IRP Filing Schedule, dated June 28, 2024, at ¶ 18, available at <https://energia.pr.gov/wp-content/uploads/sites/7/2024/07/20240628-AP20230004-Motion-in-Compliance-with-Resolution-and-Order-of-June-18-2024-and-Submitting-Second-Revised-IRP-Filing-Schedule.pdf>.

¹² See *id.* at ¶ 27.

¹³ See PREB Resolution and Order, dated August 20, 2024, available at <https://energia.pr.gov/wp-content/uploads/sites/7/2024/08/20240820-AP20230004-Resolution-and-Order.pdf>.

⁶ The RCAP amendments were approved by the Secretary of the PRDNER on November 21, 2022, and became effective on the same day.

⁷ Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan, *Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, Case No. CEPR-AP-2018-0001, August 24, 2020 ("Approved IRP"), available at <https://energia.pr.gov/wp-content/uploads/sites/7/2020/08/AP20180001-IRP-Final-Resolution-and-Order.pdf>.

⁸ See <https://energia.pr.gov/wp-content/uploads/sites/7/2015/10/AN-ACT-57-20141.pdf>.

⁹ The October 18, 2022 and November 15, 2022 letters are available in the docket of this rulemaking.

EPA outlines the requirements for nonattainment plans under CAA section 172(c), and reviews Puerto Rico's plan against these requirements in Sections IV, V and VI of this preamble.

Although Puerto Rico submitted its plan to satisfy CAA section 172(c) requirements, the EPA is proposing to approve only specific elements at this time for compliance with the CAA. The elements being proposed for approval include Puerto Rico's NNSR program and base year emissions inventory. The EPA is not proposing action on other elements of the plan, such as the attainment demonstration, RFP, RACM/RACT, emission limitation as necessary to provide for NAAQS attainment, and contingency measures. The EPA will address whether Puerto Rico is meeting its statutory obligations for those elements in a future rulemaking. Finally, amendments to the RCAP, which Puerto Rico submitted with the plan, are being proposed for approval, in part, and conditional approval, in part, based on providing SIP-strengthening.

III. Proposed Determination of Failure To Attain and the Associated Consequences

A. Applicable Statutory and Regulatory Provisions

Section 179(c)(1) of the CAA requires the EPA to determine whether a NAA attained an applicable standard by the applicable attainment date based on the area's air quality as of the attainment date. In determining the attainment status of SO₂ NAAs, the EPA may consider ambient monitoring data, air quality dispersion modeling, and/or a demonstration that the control strategy in the SIP has been fully implemented.¹⁴

Under the EPA's regulations in 40 CFR 50.17, and in accordance with 40 CFR part 50 Appendix T, the 2010 1-hour annual SO₂ standard is met when the design value is less than or equal to 75 ppb. Design values are calculated by computing the three-year average of the annual 99th percentile daily maximum 1-hour average concentrations.¹⁵ An SO₂ 1-hour primary standard design value is valid if it encompasses three consecutive calendar years of complete data. A year is considered complete when all four quarters are complete, and a quarter is complete when at least 75

percent of the sampling days are complete. A sampling day is considered complete if 75 percent of the hourly concentration values are reported; this includes data affected by exceptional events that have been approved for exclusion by the Administrator.¹⁶

A determination of whether an area's air quality meets applicable standards is generally based upon the most recent three calendar years of complete, quality-assured data gathered at established state and local air monitoring stations (SLAMS) in a nonattainment area and entered into the EPA's Air Quality System (AQS) database.¹⁷ Data from ambient air monitors operated by state and local agencies in compliance with the EPA monitoring requirements must be submitted to AQS.¹⁸ Monitoring agencies annually certify that these data are accurate to the best of their knowledge.¹⁹ All certified SO₂ air monitoring data are used to calculate design values that are used to determine the area's air quality status in accordance with 40 CFR part 50, Appendix T.

In addition to utilizing ambient monitoring data to make determinations of attainment by the attainment date, the EPA considers air quality dispersion modeling and/or a demonstration that the control strategy in the SIP has been fully implemented. With regard to the use of monitoring data for such determinations, EPA's 2014 Nonattainment SO₂ Guidance²⁰ specifically notes that if the EPA determines the air quality monitors located in the affected area are located in the area of maximum concentration, the EPA may be able to use the data from these monitors to make the determination of attainment without the use of air quality modeling data.²¹ In this case, there are SO₂ monitors within the San Juan and Guayama-Salinas NAAs; however, there is no evidence indicating that the monitors are located within the areas of expected maximum concentration.

Due to insufficient monitoring data collected for all three years in the 2020–2022 data period for the SO₂ monitors, the EPA is unable to determine valid

monitor-based 2020–2022 design values. As a result, the EPA has considered available air modeling data submitted by the PRDNER with its November 22, 2022, SIP revision, as well as the designation modeling the EPA used to initially determine that the areas were in nonattainment, to assess whether the areas attained by the attainment date.

According to the EPA's Modeling Technical Assistance Document (TAD),²² for the purpose of modeling to characterize air quality for use in designations, the recommended approach is to use the most recent 3 years of actual emissions data and concurrent meteorological data. However, the TAD also indicates that it would be acceptable to use allowable emissions in the form of the most recently permitted (referred to as PTE or allowable) emissions rate that is federally enforceable and effective. When relying on a modeling demonstration based on allowable emissions for purposes of determining attainment by the attainment date, the EPA looks to whether the emission limit or limits were adopted and whether the relevant source or sources were complying with those modeled limits prior to the attainment date. That is, when determining attainment by the attainment date using air quality modeling of allowable emissions, the EPA looks to whether the state/commonwealth has demonstrated that the control strategy in the SIP has been fully implemented. This is necessary because a modeling demonstration based on allowable emissions is not itself sufficient since, without the supporting emissions information reflected in the control strategy, there would be no way to confirm that the actual emissions were below the modeled limits within the period under review.

The EPA would like to clarify that a significant amount of information is required for the EPA to accurately conduct its own air quality dispersion modeling to determine attainment by the attainment date for these two NAAs. This information is not readily available, and the limited data currently accessible to the Agency raises concerns about the reliability of new modeling. Specifically, the EPA does not have access to fuel use data or concurrent meteorological data and continuous emissions monitoring systems (CEMS) data from the stacks at the PREPA facilities (the EPA also believes that CEMS provide acceptable historical

¹⁴ EPA, Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions (April 2014) ("2014 SO₂ Guidance"), 49.

¹⁵ As defined in 40 CFR part 50, Appendix T section 1(c), daily maximum 1-hour values refer to the maximum 1-hour SO₂ concentration values measured from midnight to midnight that are used in the NAAQS computations.

¹⁶ See 40 CFR part 50, Appendix T sections 1(c), 3(b), 4(c), and 5(a).

¹⁷ AQS is the EPA's repository of ambient air quality data.

¹⁸ 40 CFR 58.16.

¹⁹ 40 CFR 58.15.

²⁰ EPA, Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions (April 2014) ("2014 SO₂ Guidance"), p.49, available at https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf.

²¹ *Id.*, p.50.

²² See <https://www.epa.gov/so2-pollution/technical-assistance-documents-implementing-2010-sulfur-dioxide-standard>.

emissions information). As a result, it is the EPA’s position that any air quality dispersion modeling the EPA would perform for the purpose of this determination would not be representative of air quality within the areas. Thus, the EPA is not performing air quality dispersion modeling to support its determination that the areas have failed to attain by their attainment dates. The EPA will instead consider the modeling conducted and provided by the PRDNER in its November 22, 2022, SIP submission, which shows that controls that PRDNER anticipates will lead to attainment were not in place prior to the areas’ attainment dates.

As noted earlier in this section, the EPA may also consider whether the state (or commonwealth) has demonstrated that the control strategy in the SIP has been fully implemented. That said, the PRDNER’s control strategy has not been implemented, nor has it been approved by the EPA. As a result, the EPA cannot determine that the subject sources have achieved compliance with either the PRDNER’s control strategy as submitted to the EPA, or a SIP-approved strategy. To address this, the EPA is proposing a determination that the areas did not attain by their attainment date which is based on a technical analysis of various evidence available (*i.e.*, weight-of-evidence analysis): including the control strategy timeline Puerto Rico identified and adopted into its RCAP, which was determined in coordination with the air quality dispersion modeling submitted within its November 22, 2022 SIP revision as well as the EPA’s designation modeling; Puerto Rico’s failure to implement the control strategy in a timely manner thus far; and the EPA’s review of annual facility-wide emissions data from January 2020 through December 2022 for the PREPA San Juan, PREPA Palo Seco, and PREPA

Aguirre facilities located within the NAAs—as described in Sections III.B and III.C of this notice. As noted, the determination of whether the monitors are located in the area of maximum concentration is not needed here, because a demonstration is not being made that the NAAs have attained the 2010 SO₂ NAAQS by the April 9, 2023 attainment date.

B. San Juan and Guayama-Salinas SO₂ Monitoring Networks and Considerations

Section 110(a)(2)(B)(i) of the CAA requires states to establish and operate air monitoring networks to compile data on ambient air quality for all criteria pollutants. The EPA’s monitoring requirements are specified by regulation in 40 CFR part 58. These requirements are applicable to state, and where delegated, local air monitoring agencies that operate criteria pollutant monitors. The regulations in 40 CFR part 58 establish specific requirements for operating air quality surveillance networks to measure ambient concentrations of SO₂, including requirements for measurement methods, network design, quality assurance procedures, and the minimum number of monitoring sites designated as SLAMS.

In sections 4.4 and 4.5 of Appendix D to 40 CFR part 58, the EPA specifies the minimum requirements for SO₂ monitoring sites to be classified as SLAMS. SLAMS produce data that are eligible for comparison with the NAAQS, and therefore, the monitor must be an approved federal reference method (FRM), federal equivalent method (FEM), or approved regional method (ARM) monitor, pursuant to section 2 of Appendix C to 40 CFR part 58. Additionally, Appendix A to 40 CFR part 58 specifies quality assurance requirements for SLAMS monitors.

During the 2020–2022 data period, the PRDNER operated three SO₂ SLAMS in the San Juan and Guayama-Salinas SO₂ NAAs. In the San Juan NAA, SLAMS monitors are in operation at Bayamón (AQS Site ID 72–021–0010, Avenue Central Correccional) and at Cataño (AQS Site ID 72–033–0004, Northwest Street at the 11 Final Street, Las Vegas). In the Guayama-Salinas NAA, a SLAMS monitor is located at Guayama (AQS Site ID 72–057–0011, Road #3 Cuartel Vehiculos Hurtados).

C. SO₂ Data Considerations and the EPA’s Proposed Determination

1. SO₂ Monitor Data

As discussed in Section I.B of this preamble, the applicable attainment date for the San Juan and Guayama-Salinas areas was April 9, 2023. In accordance with Appendix T to 40 CFR part 50, determinations of SO₂ NAAQS compliance are based on three consecutive calendar years of data. To determine the air quality as of the attainment date in the nonattainment area, the EPA reviewed the available data collected during the three calendar years immediately preceding the attainment date for the San Juan and Guayama-Salinas areas (*i.e.*, January 1, 2020 through December 31, 2022), as well as SO₂ emissions data that resulted from the burning of fossil fuels for electricity generation at the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities.

The available annual 99th percentile daily maximum 1-hour average SO₂ data at each monitoring site within the San Juan and Guayama-Salinas areas for the 2020–2022 period are presented in Tables 1 and 2 below. Moreover, the 1-hour SO₂ design values at the Bayamón, Cataño, and Guayama SO₂ monitoring sites for the 2020–2022 period are shown in Tables 1 and 2 below.²³

TABLE 1—2020–2022 SO₂ MONITOR DATA FOR THE SAN JUAN AREA²⁴

SLAMS monitor	AQS site ID	2020 Annual 99th percentile daily maximum 1-hour average (ppb)	2021 Annual 99th percentile daily maximum 1-hour average (ppb)	2022 Annual 99th percentile daily maximum 1-hour average (ppb)	2020–2022 SO ₂ design value (ppb)
Bayamón	72–021–0010	* 35.4	9.8	10.8	Not Valid (NV).
Cataño	72–033–0004	* 17.6	* 18.2	* 0.0	NV

²³ A design value is a statistic that describes the air quality status of a given location relative to the level of the NAAQS. SO₂ design values at the Bayamón, Cataño, and Guayama SO₂ monitoring sites for the 2020–2022 period were obtained from

the EPA’s Air Quality Design Values web page. See <https://www.epa.gov/air-trends/air-quality-design-values#report>.

²⁴ Monitoring sites must meet the data completeness requirements listed in Appendix T to

40 CFR part 50 in order to have a valid design value. Annual 99th percentile daily maximum 1-hour averages with an asterisk (*) indicate that those values do not meet these completeness requirements.

TABLE 2—2020–2022 SO₂ MONITOR DATA FOR THE GUAYAMA-SALINAS AREA²⁵

SLAMS monitor	AQS site ID	2020 Annual 99th percentile daily maximum 1-hour average (ppb)	2021 Annual 99th percentile daily maximum 1-hour average (ppb)	2022 Annual 99th percentile daily maximum 1-hour average (ppb)	2020–2022 SO ₂ design value (ppb)
Guayama	72–057–0011	NV	* 3.4	* 3.4	NV

The attainment date for the areas was April 9, 2023. In order for the EPA to determine that the areas attained by the April 9, 2023 attainment date based solely on air quality monitoring data, the design value based upon complete, quality-assured monitored air quality data from three consecutive years (2020–2022) at each eligible monitoring site must be equal to or less than 75 ppb for the 1-hour standard, and air quality modeling would need to show that there was an air quality monitor located in the area of maximum concentration.

The EPA has not been provided with nor is the EPA aware of information indicating that these three monitors are located within the area of maximum concentration. Therefore, this information alone is insufficient to support a determination of whether the NAAs attained the 2010 SO₂ NAAQS by the attainment date.

2. Modeling Data and Control Strategy Timeline

The EPA’s Modeling TAD notes that for area designations under the 2010 SO₂ NAAQS, the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) modeling system should be used, unless use of an alternative model can be justified. As previously stated, the EPA did not conduct its own air dispersion modeling demonstration with AERMOD and is instead relying on the air dispersion modeling conducted by the PRDNER, as provided within its attainment demonstration submitted to the EPA on November 22, 2022.

The PRDNER’s attainment demonstration utilized version 21112 of AERMOD, with default options. Version 21112 of AERMOD was the most recent version at the time the attainment demonstration modeling was conducted. Further information pertaining to the PRDNER’s modeling, such as the area of analysis, source characterization, emissions,

meteorology and surface characteristics, geography and terrain, and background concentrations, can be found in Section V, “Review of Modeled Attainment Demonstration,” of this proposed rulemaking. For purposes of the FFA, the EPA finds the PRDNER’s modeling was conducted in a technically correct manner, consistent with the EPA’s modeling guidance.

The control strategy the PRDNER identified and modeled to provide for attainment of the standard relies primarily on the retirement of PREPA electricity generation units and is based on the integration of new renewable energy projects (as determined by PREB). However, this control strategy was not scheduled to start until February 2023, specifically involving the transition of several units to ultra-low sulfur diesel fuel. Specifically, the retirement of PREPA units was scheduled to occur in phases, from June 30, 2023, through December 31, 2025, at PREPA San Juan and PREPA Palo Seco, and from December 31, 2025, through December 31, 2029, at PREPA Aguirre.

The projected attainment dates identified by the PRDNER, via its modeling of the control strategy were December 31, 2025, for the San Juan area and December 31, 2029, for the Guayama-Salinas Area. Although these attainment dates for the control strategy were identified as being as expeditious as practicable given the integration of renewable energy sources, they provide for attainment of the standard after the CAA mandatory attainment date of April 9, 2023. Thus, based on the PRDNER’s own modeling of its control strategy, and unless that control strategy was implemented in a more expeditious manner than originally planned, the control strategy did not provide for attainment by the statutory deadline.

Additionally, the EPA notes that the Round 3 designation modeling²⁶

showed modeled concentrations well in exceedance of the standard within the San Juan and Guayama-Salinas areas, therefore requiring significant measures to be implemented to reduce such concentrations. Since it is the EPA’s understanding that the emissions controls necessary to achieve attainment of the standard were not implemented (as further discussed in Section III.C.3 of this notice), the EPA proposes to find that attainment of the standard was not provided by the mandatory attainment date.

3. Failure To Implement the Control Strategy

As of the time of signature of this proposed rulemaking, the EPA has no evidence indicating that the control strategy identified by the PRDNER and adopted within the RCAP in support of its November 22, 2022 SIP submission has in fact been implemented. Instead, available evidence indicates that the strategy has not yet been implemented, and that therefore, emissions reductions expected under the strategy have not yet been achieved. Although not federally SIP-approved, this absence of strategy implementation is considered as part of EPA’s weight of evidence analysis.

The control strategy under the PRDNER’s SIP submission is based on the retirement of emission units and the implementation of emission limits based on the use of ULSD or LNG for units that will continue to operate and generate electricity at the PREPA San Juan, PREPA Aguirre, and PREPA Palo Seco facilities. As previously noted, the control strategy was to begin in February 2023, specifically involving the transition of several units to ULSD. The PREPA unit retirements were to occur in phases—from June 30, 2023, through December 31, 2025, at PREPA San Juan and PREPA Palo Seco, and from December 31, 2025, through December 31, 2029, at PREPA Aguirre.

At PREPA Palo Seco and PREPA Palo San Juan, several boilers were required

²⁵ Monitoring sites must meet the data completeness requirements listed in Appendix T to 40 CFR part 50 in order to have a valid design value. Annual 99th percentile daily maximum 1-hour averages with an asterisk (*) indicate that those values do not meet these completeness requirements.

²⁶ The San Juan and Guayama-Salinas areas were designated nonattainment based on Puerto Rico’s modeling, which indicated that the highest predicted 99th percentile daily maximum 1-hour concentration (i.e., modeled concentration) within the chosen modeling domain to be 422 µg/m³ (equivalent to 161 ppb) for the San Juan area and 252 µg/m³ (equivalent to 96 ppb) for the Guayama-Salinas area. These modeled concentrations, which

are above the NAAQS level of 196.4 µg/m³ (equivalent to the 2010 SO₂ NAAQS of 75 ppb reflecting a 2.619 µg/m³ conversion factor), were based on actual emissions from the facilities. The TSD for the Round 3 designations is found within the docket for this rulemaking.

to retire by June 30, 2023. Specifically, at PREPA Palo Seco, Boiler 1, Boiler 2, Power Block 2–2, Power Block 3–1, and Power Block 3–2 had a retirement compliance date of June 30, 2023. At PREPA San Juan, Boiler 7, Boiler 8, and Boiler 10 were required to retire by June 30, 2023. Additional retirements are required at PREPA Palo Seco by December 31, 2025 (*i.e.*, Boiler 4), and PREPA San Juan by December 31, 2024 (*i.e.*, Boiler 9). PREPA Aguirre units are scheduled to retire beginning December 31, 2025, through December 31, 2029.²⁷

A more detailed discussion of the retirement of emission units and the implementation of emission limits for units that will remain in operation at the PREPA San Juan, PREPA Aguirre, and PREPA Palo Seco facilities can be found under Section V, “Review of Modeled Attainment Demonstration,” subsection G, of this proposed rulemaking.

As mentioned previously in Section I, “Background,” of this notice, the compliance strategy for Puerto Rico’s SIP was developed based on the most recent IRP approved by the PREB in 2020, as well as additional updates provided by the PREB in 2022, which considered emission unit retirements within the San Juan and Guayama-Salinas NAAs following the integration of renewable energy sources and battery storage resources. It is the EPA’s understanding that the integration of renewable energy sources has been delayed, including the deployment of solar projects under Tranche 1, due to renegotiations and legal challenges pertaining to the use of the land

identified for development.²⁸ Tranche 1 was expected to provide at least 1,000 MW solar PV (or energy-equivalent other renewables) and at least 500 MW (2,000 MWh or equivalent) battery energy storage;²⁹ however, its delayed implementation has impacted the PREPA’s ability to retire units in accordance with the submitted SIP control strategy since other means of providing electricity to citizens of the areas is not sufficient.

The transition to renewable energy, which will allow the retirement of units at PREPA San Juan, PREPA Aguirre, and PREPA Palo Seco, has an uncertain timeline. As indicated previously, the IRP was scheduled to be revised and submitted to the PREB in June 2024 by LUMA, but that process has been delayed to November 29, 2024. The EPA anticipates that a new IRP³⁰ will provide an updated schedule for emission unit retirements and the integration of renewable energy. Moreover, under the current IRP,³¹ PREPA will retire units “based on the installation schedule and location of new peaking generation, new solar PV, and energy storage resources to address overall and local resource adequacy.” Accordingly, the retirement sequence of the existing PREPA units is contingent on the timing, amount, and location of replacement generation, which will further complicate Puerto Rico’s ability to ensure that retirements of emission units occur as provided within its submitted control strategy timeline.

The delay in implementing the submitted control strategy and the extended timeline and uncertainty for

transitioning to renewable energy projects serve as additional evidence that Puerto Rico has not met, and has fallen well behind, the statutorily required attainment date of April 9, 2023. Moreover, given that the modeling submitted by PRDNER did not anticipate the areas would attain the NAAQS until well beyond the statutory April 9, 2023 attainment date, the EPA proposes to find that attainment of the standard did not occur by the statutory attainment date of April 9, 2023.

4. SO₂ Emissions Data

The EPA has compiled information from its Emission Inventory System (EIS) that details total SO₂ emissions from 2020–2022 across the three PREPA facilities.³² The Emissions Inventory System (EIS) Gateway was developed to provide registered EPA, state, local, and Tribal users with access to emissions inventory data.³³ The EIS helps the EPA to build the National Emissions Inventory (NEI). Additionally, the EIS Gateway allows users to manage their profile information to add, view, and edit facility inventory information for their agency; extract data by running reports; and access reporting codes. Hourly and monthly data are not available in the EIS Gateway, so the EPA will utilize annual emissions from 2020–2022 at the three PREPA facilities within the discussion regarding annual emission trends in the NAAs since the designations. That information is as follows:

TABLE 3—FACILITY-WIDE SO₂ EMISSIONS OF POINT SOURCES IN THE NAAs FROM 2020–2022³⁴

Stationary point source	Nonattainment area	2020 SO ₂ emissions (tons per year)	2021 SO ₂ emissions (tons per year)	2022 SO ₂ emissions (tons per year)
PREPA San Juan	San Juan	3,257	1,369	2,740
PREPA Palo Seco	San Juan	5,272	4,322	4,488
PREPA Aguirre	Guayama-Salinas	8,829	8,164	5,434

³⁴ 2021 and 2022 data are preliminary and will be finalized upon release of the 2023 NEI.

The PREPA San Juan facility emitted 3,257 tons of SO₂ in 2020, 1,369 tons of SO₂ in 2021, and 2,740 tons of SO₂ in 2022. The PREPA Palo Seco facility

emitted 5,272 tons of SO₂ in 2020, 4,322 tons of SO₂ in 2021, and 4,488 tons of SO₂ in 2022. Finally, the PREPA Aguirre facility emitted 8,829 tons of SO₂ in

2020, 8,164 tons of SO₂ in 2021, and 5,434 tons of SO₂ in 2022.

²⁷ Refer to Table 7. PREPA Aguirre SO₂ Emission Limits under Section V, “Review of Modeled Attainment Demonstration” of this rulemaking for more detailed information regarding the specific units scheduled to retire from December 31, 2025, through December 31, 2029.

²⁸ See Section 6.2, “Inputs and Assumptions” of the “Puerto Rico Grid Resilience and Transitions to 100% Renewable Energy Study (PR100)” provided within the docket for this rulemaking.

²⁹ See ¶ 860 of the “Final Resolution and Order on the PREPA’s IRP” included within the docket for this rulemaking.

³⁰ Due to the complexity and coordination required between stakeholders such as the PREPA, the PREB, and LUMA, it is anticipated that a revised IRP will not be finalized until late 2026 or 2027 at this point in time.

³¹ See ¶ 870–873 of the “Final Resolution and Order on the PREPA’s IRP.”

³² 2021 and 2022 data are preliminary and will be finalized upon release of the 2023 NEI. The 2023 NEI inventory year is in progress and will not be published until March 2026. See <https://www.epa.gov/air-emissions-inventories/2023-national-emissions-inventory-nei-documentation>.

³³ For more information on EIS, refer to <https://www.epa.gov/air-emissions-inventories/emissions-inventory-system-eis-gateway>.

TABLE 4—FACILITY-WIDE SO₂ EMISSIONS OF POINT SOURCES IN THE NAAS FROM 2013–2015

Stationary point source	Nonattainment area	2013 SO ₂ emissions (tons per year)	2014 SO ₂ emissions (tons per year)	2015 SO ₂ emissions (tons per year)
PREPA San Juan	San Juan	5,307	5,135	6,063
PREPA Palo Seco	San Juan	5,700	3,128	2,979
PREPA Aguirre	Guayama-Salinas	9,640	9,261	9,585

Notably, as provided within the Round 3 designations,³⁵ Table 4 indicates that SO₂ emissions were: (1) 5,307 tons in 2013, 5,135 tons in 2014, and 6,063 tons in 2015 for PREPA San Juan; (2) 5,700 tons in 2013, 3,128 tons in 2014, and 2,979 tons in 2015 for PREPA Palo Seco; and (3) 9,640 tons in 2013, 9,261 tons in 2014, and 9,585 tons in 2015 for the PREPA Aguirre facility.

While there has been a decrease in emissions at the PREPA San Juan and PREPA Aguirre facilities, it is important to note that the thousands of tons of SO₂ emitted by these facilities from 2020 to 2022 are significant. Notably, although emissions at PREPA Palo Seco appear to have decreased from 2013 through 2015, emissions increased at the facility from 2015 to 2020. It is the EPA's understanding, based on the air quality dispersion modeling the PRDNER provided in its attainment modeling for its SO₂ plan, that SO₂ emissions from the three PREPA facilities would need to significantly decrease in order to provide for attainment of the SO₂ standard. The PRDNER projected that SO₂ emissions would be 43 tons per year (tpy) at PREPA San Juan and 12 tpy at PREPA Palo Seco by the PRDNER-projected attainment date of December 31, 2025, as well as 4 tpy at PREPA Aguirre by the PRDNER-projected attainment date of December 31, 2029.³⁶ In contrast, the SO₂ emissions listed in Table 3 are significantly higher than the emissions for which the PRDNER modeled to provide attainment. Thus, since the EPA was unable to conduct its own additional air quality dispersion modeling, the EPA has no evidence indicating that the SO₂ emissions at the

facilities from 2020–2022 would provide for attainment of the 2010 1-hour primary SO₂ NAAQS by the statutory attainment date.

The EPA's emissions assessment focused specifically on the three PREPA sources: PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre. These sources were significantly larger in terms of emissions compared to smaller and more distant sources like Bacardi, Edelcar, and Applied Energy System (AES). As a result, the smaller emissions from these distant sources were dwarfed by the impact of the explicitly modeled PREPA sources.³⁷ For example, AES emitted 245 tons of SO₂ in 2014. The EPA's conclusion was based on this consideration, ensuring that the emissions assessment accurately reflected the most relevant contributors to air quality in the vicinity.

Consequently, the EPA proposes to find that emissions from the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities continue to be significant and provide additional evidence that the San Juan and Guayama-Salinas areas have not attained the 2010 1-hour primary SO₂ NAAQS by the statutory attainment date of April 9, 2023.

5. The Weight-of-Evidence Analysis Conclusions and the EPA's Proposed Determination

The determination of failure to attain for the San Juan and Guayama-Salinas NAAs is based on a control strategy timeline that does not provide for attainment by the statutorily required attainment date, Puerto Rico's failure to implement its adopted control strategy in a timely manner, and the EPA's review of annual facility-wide emissions data from January 2020 through December 2022 for the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities.

³⁷ As discussed within Section V.B., "Area of Analysis," within this notice, based on the magnitude of emissions and distance relative to the NAAs, the EPA concluded that the smaller and more distant sources were adequately represented in the monitored ambient background concentrations. The EPA concluded that these sources were not expected to have their maximum impacts in the vicinity of PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre.

As discussed in this notice, Puerto Rico's control strategy is deficient in providing for attainment by the mandatory attainment date. It provided for attainment after the statutory date and it failed to practicably account for the feasibility of retiring relevant emission units, resulting in its failure to be timely implemented. The EPA's assessment of the air quality dispersion modeling that the PRDNER provided in its November 22, 2022 SIP submittal provides further support for this determination. Moreover, due to its inability to obtain valid design values from SO₂ monitors in the San Juan and Guayama-Salinas areas, the EPA did not utilize monitoring data as the basis for this determination. The EPA obtained facility-wide SO₂ emissions from 2020–2022 at PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre. This emissions data demonstrates that emissions from the three PREPA facilities continue to be significant and there is no evidence that they provide for attainment of the standard.

The EPA proposes to find that this weight-of-evidence analysis is sufficient to demonstrate that the San Juan and Guayama-Salinas area failed to attain the standard by the mandatory attainment date. The EPA therefore proposes to find under CAA section 179(c)(1) that the San Juan and Guayama-Salinas NAAs failed to attain the 1-hour SO₂ NAAQS by the required attainment date of April 9, 2023.

D. Consequences for SO₂ NAAs Failing To Attain Standards by Attainment Date

The consequences for SO₂ NAAs failing to attain the standards by the applicable attainment date are set forth in CAA section 179(d). Under section 179(d), a state must submit a SIP revision for the area meeting the requirements of CAA sections 110 and 172, the latter of which requires, among other elements, a demonstration of attainment, an NNSR program, the base year emissions inventory, the requirements for meeting RFP, RACM/RACT, and contingency measures. In addition, under CAA section 179(d)(2), the SIP revision must include such additional measures as the EPA may reasonably prescribe, including all

³⁵ Modeling of the 2013–2015 emissions data, which showed that the San Juan and Guayama-Salinas areas did not meet the 2010 SO₂ NAAQS, was a basis for the nonattainment designation.

³⁶ The PRDNER's modeling results under the Attainment Demonstration provided in its November 22, 2022 SIP submission indicated that these emissions would result in a modeled concentration of 47.518 µg/m³ for the San Juan NAA and 47.191 µg/m³ for the Guayama-Salinas NAA. These concentrations are below what would be required for the NAAs to attain the 2010 SO₂ standard. For additional information on the projected emissions at the PREPA facilities, see Table 11, "Projected Stationary Point Source SO₂ Emissions for 2019–2029" under Section VI, subsection A, "Emissions Inventory," within this proposed rulemaking.

measures that can be feasibly implemented in the area, in light of technological achievability, costs, and any non-air quality and other air quality-related health and environmental impacts.

In this case, the primary sources of SO₂ emissions in the San Juan and Guayama-Salinas NAAs are the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities. The EPA anticipates that the PRDNER will collect relevant information on the control measures necessary to achieve attainment by the required attainment date, as part of its development of the SIP revision triggered by a final FFA. The state (or commonwealth) is required to submit the SIP revision within one year after the EPA publishes a final action in the **Federal Register** determining that the NAA failed to attain the SO₂ NAAQS.

With this proposed rulemaking, the EPA is also proposing to approve certain elements of the 2010 SO₂ attainment plans for the San Juan and Guayama-Salinas NAAs, as submitted on November 22, 2022, for compliance with the CAA and for SIP-strengthening purposes. Specifically, the EPA is proposing to approve Puerto Rico's NNSR program and the base year emissions inventory for compliance with the CAA; as well as proposing to approve, in part, and conditionally approve, in part, amendments to Puerto Rico's RCAP for SIP-strengthening purposes. The EPA will not act on Puerto Rico's previously submitted demonstration of attainment, RACM/RACT, RFP, emission limitations as necessary to provide for attainment, and contingency measures, since these elements will be addressed in the subsequent submittal as a result of the FFA, should it become final.

Under CAA sections 179(d)(3) and 172(a)(2), the new attainment date for each NAA is the date by which attainment can be achieved as expeditiously as practicable, but no later than five years after the EPA publishes a final action in the **Federal Register** determining that the NAA failed to attain the SO₂ NAAQS by the applicable attainment date.

IV. Requirements for SO₂ Nonattainment Area Plans

Nonattainment plans for SO₂ must meet the applicable requirements of the CAA, specifically CAA sections 110, 172, 191, and 192. The EPA's regulations governing nonattainment SIP submissions are set forth in 40 CFR part 51, with specific procedural requirements and control strategy requirements codified at subparts F and G, respectively. Soon after Congress

enacted the 1990 Amendments to the CAA, the EPA issued comprehensive guidance on SIP revisions in the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" ("General Preamble").³⁸ Among other things, the General Preamble addressed SO₂ SIP submissions and fundamental principles for SIP control strategies.³⁹ On April 23, 2014, the EPA issued recommended guidance for meeting the statutory requirements in SO₂ SIP submissions in a document entitled, "Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions" ("2014 SO₂ Guidance").⁴⁰

In the 2014 SO₂ Guidance, the EPA described the statutory requirements of CAA section 172(c) for a complete nonattainment plan, including: an accurate emissions inventory of current emissions for all sources of SO₂ within the NAA; an attainment demonstration; a demonstration of RFP; implementation of RACM (including RACT); new source review; enforceable emission limitations and control measures; and adequate contingency measures for the affected area.

For the EPA to fully approve a SIP revision which meets the requirements of CAA sections 110, 172, 191, and 192, and the EPA's regulations at 40 CFR part 51, the plan for an affected area must demonstrate to the EPA's satisfaction that each of the aforementioned requirements has been met. Under CAA section 110(l), the EPA may not approve a plan that would interfere with any applicable requirement concerning NAAQS attainment and RFP, or any other applicable requirement. Under CAA section 193, no requirement in effect (or required to be adopted by an order, settlement, agreement, or plan in effect before November 15, 1990) within any area that is nonattainment for any of the NAAQS may be modified in any manner unless it ensures equivalent or greater emission reductions of such air pollutant.

Sections 172(c)(1) and 172(c)(6) of the CAA direct states and territories with areas designated as nonattainment to demonstrate that the submitted plan, and the emissions limitations and control measures in it, provide for attainment of the NAAQS. 40 CFR part 51, subpart G further delineates the control strategy requirements that plans must meet, and the EPA has long required that all SIPs and control

strategies reflect four fundamental principles of quantification, enforceability, replicability, and accountability.⁴¹ SO₂ nonattainment plans must consist of two components: (1) emission limits and other control measures that ensure 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 limits and control measures provide for timely attainment of the primary SO₂ NAAQS as expeditiously as practicable, but no later than the attainment date for the affected area. In cases where the necessary emission limits have not previously been made a part of the state's SIP or have not otherwise become federally enforceable, the plan must include the necessary enforceable limits in an adopted form suitable for incorporation into the SIP in order for the plan to be approved by the EPA. In all cases, the emission limits and control measures must be accompanied by appropriate methods and conditions to determine compliance with the respective emission limits and control measures and must be quantifiable (*i.e.*, a specific amount of emission reduction can be ascribed to the measures), fully enforceable (*i.e.*, specifying clear, unambiguous, and measurable requirements for which compliance can be practicably determined), replicable (*i.e.*, the procedures for determining compliance are sufficiently specific and objective so that two independent entities applying the procedures would obtain the same result), and accountable (*i.e.*, source-specific limits must be permanent and must reflect the assumptions used in the SIP demonstrations).

The EPA's 2014 SO₂ Guidance recommends that emission limits be expressed as short-term average limits not to exceed the averaging time for the applicable NAAQS that the limit is intended to help maintain (*e.g.*, addressing emissions averaged over one or three hours), but it also describes the option to utilize emission limits with longer averaging times of up to 30 days, so long as the state/commonwealth meets various suggested criteria.⁴² The 2014 SO₂ Guidance recommends that, should states/territories and sources utilize longer averaging times (such as 30 days), the longer-term average limit should be set at an adjusted level that reflects a stringency comparable to the 1-hour average limit at the critical emission value shown to provide

³⁸ 57 FR 13498 (April 16, 1992).

³⁹ *Id.* at 13548–13549, 13567–13568.

⁴⁰ See https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf.

⁴¹ 57 FR at 13567–13568.

⁴² 2014 SO₂ Guidance, at 22–39.

attainment. Additional discussion of EPA's rationale for approving longer-term average limits in selected cases has been provided in several notices of proposed rulemaking. Examples include the Pekin, Illinois area,⁴³ the Steubenville, Ohio-West Virginia area,⁴⁴ and the Central New Hampshire area.⁴⁵

Preferred air quality models for use in regulatory applications are described in Appendix A of the EPA's "Guideline on Air Quality Models" (40 CFR part 51, Appendix W ("Appendix W")).⁴⁶ In general, nonattainment SIP submissions must demonstrate the adequacy of the selected control strategy using the applicable air quality model designated in Appendix W.⁴⁷ However, where an air quality model specified in Appendix W is inappropriate for the particular application, the model may be modified or another model substituted, if the EPA approves of the modification or substitution.⁴⁸ In 2005, the EPA promulgated the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD⁴⁹) as the Agency's preferred near-field dispersion model for a wide range of regulatory applications addressing stationary sources (e.g., in estimating SO₂ concentrations) in all types of terrain based on an extensive developmental and performance evaluation. Supplemental guidance on modeling for purposes of demonstrating attainment of the SO₂ standard is provided in Appendix A of the 2014 SO₂ Guidance.

Appendix A of the April 23, 2014, *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions* provides extensive guidance on the modeling domain, the source inputs, assorted types of meteorological data, and background concentrations. Consistency with the recommendations in the 2014 SO₂ 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 SO₂ 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 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 SO₂ NAAQS. For the short-term (i.e., 1-hour) standard, the EPA believes that dispersion modeling, using allowable emissions and addressing stationary sources in the affected area (and in some cases those sources located outside the NAA that may affect attainment in the area) is technically appropriate. This approach is also efficient and effective in demonstrating attainment in NAAs because it takes into consideration combinations of meteorological and source operating conditions that may contribute to peak ground-level concentrations of SO₂.

The meteorological data used in the analysis should generally be processed with the most recent version of AERMET, which is the meteorological data preprocessor for AERMOD. Estimated concentrations should include ambient background concentrations, follow the form of the standard, and be calculated as described in the EPA's August 23, 2010 clarification memorandum.⁵⁰

V. Review of Modeled Attainment Demonstration

The EPA is not at this time proposing action on the attainment demonstration submitted by the PRDNER that aims to provide for attainment of the 2010 SO₂ NAAQS. However, the following discussion addresses various features of the modeling that the PRDNER used in its submitted attainment demonstration for the San Juan and Guayama-Salinas NAAs. This discussion may be useful for the PRDNER as it continues its efforts. Additionally, the modeling was considered by the EPA in part of the weight-of-evidence analysis for the FFA. The EPA anticipates acting on an updated attainment demonstration in a future SIP submission.

A. Modeling Approach

The PRDNER's submitted attainment demonstration utilized the EPA's preferred model, version 21112 of AERMOD, with default options. Version 21112 of AERMOD was the most recent version at the time the attainment demonstration modeling was conducted; however, since then, version 23132 of AERMOD has become the

regulatory model version. There were no updates from version 21112 to version 23132 that would significantly affect the SO₂ concentrations predicted here. Therefore, for its own purposes, the EPA does not consider the model selection to have been inappropriate. However, in a future SIP submission, the EPA expects that the PRDNER would use the version of the model that is current at the time of the analysis.

The PRDNER examined land use within three kilometers of the facilities in the two NAAs using the Auer technique, which is a technique in section 7.2.1.1 of Appendix W for establishing if an area should be modeled as either an urban or rural source. It was determined by PRDNER that San Juan should be modeled with urban dispersion characteristics and Guayama-Salinas should be modeled with rural dispersion characteristics. The EPA has reviewed the maps and images provided by the PRDNER and expects that it would be reasonable for the PRDNER to use these characteristics in future modeling.

B. Area of Analysis

The PRDNER accounted for SO₂ impacts in the modeling domain through the inclusion of measured background levels and explicitly modeled emission sources. In the San Juan NAA, the PRDNER included the largest SO₂ sources in the modeling—PREPA San Juan and PREPA Palo Seco. The impact from other sources of SO₂ in the San Juan NAA (contributions from Bacardi U.S.A., Inc. (200 PR-165 Cataño, 00962), Edelcar Inc. (CVMQ+FGQ, Calle B, Guaynabo, 00965), and other minor and distant sources), are included in the background monitored concentrations, which are added to the concentrations from the explicitly modeled sources. In the Guayama-Salinas NAA, the PRDNER included the largest SO₂ source in the modeling—PREPA Aguirre (State Road No. 3, Int. 705, Salinas, 00751). The impact from the other sources of SO₂ in the Guayama-Salinas NAA (i.e., Applied Energy System (AES) Puerto Rico, LP (PR-3 Km. 142.0, Jobos Ward, Guayama, 00784) and other minor and distant sources) are included in the background monitored concentrations, which are also added to the concentration from the explicitly modeled sources.

The PRDNER modeled sources in the NAAs (i.e., PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre) that could cause or contribute to a NAAQS violation. The impacts of emissions of SO₂ from smaller and distant sources are represented by background monitored concentrations (such as

⁴³ 82 FR 46434 (Oct. 5, 2017).

⁴⁴ 84 FR 29456 (June 24, 2019).

⁴⁵ 82 FR 45242 (Sept. 28, 2017).

⁴⁶ The EPA published revisions to Appendix W on January 17, 2017, 82 FR 5182.

⁴⁷ 40 CFR 51.112(a)(1).

⁴⁸ 40 CFR 51.112(a)(2); Appendix W, section 3.2.

⁴⁹ See <https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models#aermod>.

⁵⁰ See "Applicability of Appendix W Modeling Guidance for the 1-hr SO₂ National Ambient Air Quality Standard" (August 23, 2010), available at https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20100823_page_1-hr_so2_naaqs_psd_program.pdf.

Bacardi, Edelcar, and AES). These emissions were dwarfed by emissions from the three much larger PREPA sources and would not be expected to have their maximum impacts in the vicinity of the sources of interest.⁵¹ However, they may have a smaller impact, which is measured at the ambient monitor and added to the modeled concentration. For instance, AES, which is situated in Jobos and within close proximity to PREPA Aguirre (*i.e.*, less than 5 kilometers away), is a relatively small source of SO₂ emissions when compared to the PREPA facility. In 2014,⁵² AES emitted 245 tons of SO₂, whereas PREPA Aguirre released a significantly larger amount of 9,261 tons of SO₂ during the same period. Further, AES is approximately 8.5 kilometers east of PREPA Aguirre and less than 5 kilometers upwind of the Guayama background monitor. Thus, the AES concentration in the area of PREPA Aguirre is captured by the measured ambient background monitored concentration and added to PREPA Aguirre's maximum modeled concentration for a total air quality SO₂ concentration in the area.⁵³

Based on the magnitude of emissions and distance relative to the NAAs, the EPA expects that the smaller and more distant sources would not have their maximum impacts in the vicinity of PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre. Accordingly, the EPA expects that in future modeling, those sources could be adequately represented in the monitored ambient background concentrations, and that the PRDNER's future attainment demonstration could account for them in this way. Additionally, the EPA believes that the background levels could reasonably account for other sources influencing air quality within the NAAs because data used to develop background levels include hours during which those

⁵¹ When considering other sources to include in the modeling (other than those that are driving the nonattainment), Appendix W in section 8.3.3.b states that all sources expected to cause a significant concentration gradient in the vicinity of the source of interest should be explicitly modeled and that the number of such sources is expected to be small except in unusual cases.

⁵² Data from 2014 was representative of the emissions data that was used for the designations of the SO₂ NAAs in Puerto Rico. Furthermore, the PRDNER used 2014 as the base year for emissions inventory preparation. The base year inventory establishes a baseline that is used to evaluate emission reductions achieved by the control strategy.

⁵³ See the Technical Support Document, Chapter 36, Final Round 3 Area designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for Puerto Rico, available at <https://www.epa.gov/sites/default/files/2017-12/documents/36-pr-so2-rd3-final.pdf>.

sources may have impacted the monitors. However, the EPA acknowledges that conditions pertaining to ambient background level concentrations of these smaller and distant sources could be different in the future.

C. Receptor Grid

Within AERMOD, air quality concentration results are calculated at discrete locations identified by the user; these locations are called receptors. The PRDNER used a coarse grid to determine the maximum 1-hour SO₂ concentrations and the extent of the significant impact area. A denser refined grid was placed around the areas of maximum 1-hour concentration and discrete receptors were placed around the facility fence lines.

For the San Juan NAA, a coarse receptor grid with 250-meter spacing covers areas with violating receptors and the extent of the significant impact area. Two refined 50-meter spacing receptor grids cover the two areas with maximum 1-hour SO₂ concentrations around PREPA San Juan and PREPA Palo Seco.

For the Guayama-Salinas NAA, a coarse grid with 1000-meter spacing extending out to 50 kilometers from the source is used to determine the significant impact area. Two refined 50-meter spacing receptor grids cover the area with the maximum 1-hour SO₂ concentration and another area approximately five miles northwest of the facility. Beyond the 50-meter refined grid around the facility, a 250-meter spacing grid is also placed around the facility area to ensure that any significant concentrations are identified.

The EPA expects that the receptor network could be sufficient to identify maximum impacts from all the facilities in consideration for characterizing the NAAs in the PRDNER's future submission.

D. Meteorological Data

The PRDNER utilized onsite meteorological data from both the PREPA San Juan and PREPA Aguirre meteorological stations, which was collected and provided by PREPA. The PRDNER utilized concurrent Upper Air data measured at the San Juan National Weather Service located at the San Juan Airport. The PRDNER provided confirmation that PREPA collected the meteorological data and conducted quality assurance/quality control (QA/QC) procedures on the data in accordance with EPA's meteorological

guidance.⁵⁴ The PRDNER further reviewed the data for relevance and quality assurance, as per the EPA's guidelines, prior to processing it for use within AERMOD. Since there was one year that satisfied the EPA's data completeness requirements, the PRDNER utilized only one year of meteorological data from 2013 for the San Juan NAA. In the Guayama-Salinas NAA, the PRDNER used three years of meteorological data from 2014–2016, since multiple years of data were available.

The EPA observed that the temperature data at both stations was measured at three meters above the rooftop and could be possibly influenced by other radiation sources. The concurrent San Juan National Weather Service data was used as a substitute only for the temperature data. Additionally, since the wind sensor was switched during the data collection period, the EPA requested that the PRDNER perform additional analysis on the data collected at PREPA Aguirre. The new sensor has a higher wind threshold compared to the older sensor. The EPA recommended that the PRDNER perform two separate AERMET runs, one with the older sensor threshold and another with the new sensor threshold, and then combine the files for use in AERMOD. The PRDNER followed this recommendation to process the data and used it for the AERMOD runs for the Guayama-Salinas NAA.

The PRDNER used AERMOD's meteorological data preprocessor AERMET (version 21112) with the ADJ_U* option (with no turbulence data included), and Upper Air meteorological data from the San Juan National Weather Service site, to process the data in AERMOD. The PRDNER used AERSURFACE (version 20060) using land cover data from the National Land Cover Database 200 (NLCD 2001) to estimate the surface characteristics (albedo, Bowen ratio, and surface roughness length).

E. Source Characterization

The EPA also reviewed the PRDNER's source characterization in its modeling assessment, including source types, use of accurate stack parameters, and inclusion of building dimensions for building downwash. The EPA expects that the PRDNER would use these in its future submission.

⁵⁴ See "Meteorological Monitoring Guidance for Regulatory Modeling Applications" (Feb. 2000), available at https://www.epa.gov/sites/default/files/2020-10/documents/mmmgrma_0.pdf.

F. Emissions Data

The PRDNER used maximum allowable 1-hour emissions from PREPA San Juan and PREPA Palo Seco for the San Juan NAA, and from PREPA Aguirre for the Guayama-Salinas NAA. The modeling included the certified SO₂ emission rates as provided by PREPA. The modeling demonstration considers unit retirements at the PREPA facilities as discussed in Section V, subsection G below. The PRDNER did not include start-up and shut-down emissions in the modeling due to their infrequent occurrence of up to 2–3 times a year.

G. Retirements and Emission Limits

The PRDNER’s attainment modeling in both the San Juan and Guayama-Salinas NAAs is based on the retirement of emission units and the implementation of emission limits for units that will remain in operation for electricity generation at the PREPA San Juan, PREPA Aguirre, and PREPA Palo Seco facilities through requiring fuel switching to ULSD (Ultra Low Sulfur Diesel) fuel and LNG (Liquified Natural Gas). The PRDNER noted in its SIP narrative and Rule 425 of the RCAP that the retirement dates for the plan were provided by the PREB based on the projected integration of renewable energy to the generation grid.⁵⁵ The PRDNER noted that this compliance strategy is consistent with the existing approved IRP, as it considers the addition of power generation and emission unit retirements within the PREPA fleet.

Table 5 summarizes the SO₂ emission limits (lb/hr) and/or other requirements, including fuel to be fired (0.0015% by weight (15 ppm) ULSD) and retirements, for emission units at the PREPA Palo Seco facility.

TABLE 5—PREPA PALO SECO SO₂ EMISSION LIMITS

Emission unit	SO ₂ emission limit and/or other requirements	Compliance date
Boiler 1	Retire ..	June 30, 2023
Boiler 2 ⁵⁶	Retire ..	June 30, 2023
Boiler 3	Retire ..	December 31, 2024
Boiler 4	Retire ..	December 31, 2025
Power Block 1–1, 1–2.	0.5 lb/hr, ULSD.	February 1, 2023
Power Block 2–1	0.5 lb/hr, ULSD.	February 1, 2023
Power Block 2–2 ⁶¹ .	Retire ..	June 30, 2023
Power Block 3–1	Retire ..	June 30, 2023
Power Block 3–2 ⁶¹ .	Retire ..	June 30, 2023
FT8 MobilePac 1	0.4 lb/hr, ULSD.	February 1, 2023
FT8 MobilePac 2	0.4 lb/hr, ULSD.	February 1, 2023
FT8 MobilePac 3	0.4 lb/hr, ULSD.	February 1, 2023

Table 6 summarizes the SO₂ emission limits (lb/hr) and/or other requirements, including fuel to be fired (0.0015% by weight (15 ppm) ULSD and 1 gram/100 dscf LNG) and retirements, for emission units at the PREPA San Juan facility.

TABLE 6—PREPA SAN JUAN SO₂ EMISSION LIMITS

Emission unit	SO ₂ emission limit and/or other requirements	Compliance date
Gas Turbines SJ 5 & 6 ⁵⁷ .	9.8 lb/hr, ULSD/LNG.	February 1, 2023
Boiler 7	Retire	June 30, 2023
Boiler 8	Retire	June 30, 2023
Boiler 9	Retire	December 31, 2024
Boiler 10	Retire	June 30, 2023

Table 7 summarizes the SO₂ emission limits (lb/hr) and/or other requirements, including fuel to be fired (0.0015% by weight (15 ppm) ULSD) and retirements, for emission units at the PREPA Aguirre facility.

TABLE 7—PREPA AGUIRRE SO₂ EMISSION LIMITS

Emission unit	SO ₂ emission limit and/or other requirements	Compliance date
AG1	Retire	December 31, 2025
AG2	Retire	December 31, 2026
Gas Turbine CC1–1HRSG	Retire	December 31, 2028
Gas Turbine CC1–2HRSG	Retire	December 31, 2028
Gas Turbine CC1–3HRSG	Retire	December 31, 2028
Gas Turbine CC1–4HRSG	Retire	December 31, 2029
Gas Turbine CC2–1HRSG	Retire	December 31, 2029
Gas Turbine CC2–3HRSG	Retire	December 31, 2029

As indicated earlier in this section, the PRDNER’s control strategy is based on the retirement of emission units and the implementation of emission limits

for units that will remain in operation at the PREPA San Juan, PREPA Aguirre, and PREPA Palo Seco facilities through requiring fuel switching to ULSD and

LNG. There is no intention and/or indication of an intention to implement longer-term averaging limits within the PRDNER’s submission, and therefore, no

⁵⁵ The PREB provided a projected schedule for emission unit retirements and the integration of new renewable energy and battery storage resources via letter to the PRDNER on October 18, 2022, which was updated on November 15, 2022. These letters are available in the docket of this rulemaking.

⁵⁶ Palo Seco Boiler 2, Power Block 2–2, and Power Block 3–2 were permanently shut down and

out of service on November 9, 2022 (to generate netting credits for three MobilePac units in Palo Seco).

⁵⁷ The Gas Turbines SJ 5&6 have been operating as dual-fuel units since late 2019. The PRDNER required the units to switch to ULSD by February 1, 2023. As of February 1, 2023, the SJ 5&6 emission units have been subject to a maximum sulfur content of 0.0015% by weight (15 ppm) (which is

equivalent to an SO₂ emission rate of 5.1 lb/hr under ULSD firing), as well as a separate SO₂ limit of 9.8 lb/hr under LNG firing. As listed in Table 2 above, the PRDNER utilized the more conservative rate under LNG firing load for the attainment demonstration. More information pertaining to this can be reviewed on page 59 of the Modeling Protocol included in the docket for this rulemaking.

discussion regarding longer-term averaging limits is warranted.

Rule 425 of the RCAP provides requirements for the SO₂ plan, including providing emission reductions through an interim remedy. Under the “Interim Plan,” as detailed within Sections II, “Emission Limitations for PREPA San Juan and PREPA Palo Seco” and III, “Emission Limitations for PREPA Aguirre” of Rule 425, certain emission units located at the PREPA facilities in Palo Seco, San Juan, and Aguirre are prohibited from burning any fuel oil above a maximum sulfur content of 0.0015 percent by weight (15ppm) after February 1, 2023. To clarify, while the interim plan requiring ULSD provides for significant SO₂ emission reductions, there is no indication that the reductions are enough to provide for attainment of the NAAQS.

The PRDNER has provided a schedule of retirements for the PREPA steam generating units based on the integration of renewable energy into the system. According to Section II(B) and Section III(B) of Rule 425, the emission units from the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities shall be retired as early as the dates provided in tables 5–7 above, unless an alternative date is authorized by the PREB. This alternative date shall be no later than December 31, 2025, for PREPA San Juan and Palo Seco, and no later than December 31, 2029, for PREPA Aguirre.⁵⁸ If an alternative date is requested, PREPA would be required to submit to the PRDNER a revision to the construction and operation emission source permits, a copy of the PREB’s alternative retirement date authorization, and an explanation for the necessity of the alternative date.

The EPA is not acting on Section II(B) and Section III(B) of Rule 425 since the EPA anticipates these provisions will be revised following the EPA’s final action on the FFA, which will require the PRDNER to submit a subsequent SIP revision. The EPA further evaluates the approvability of Rule 425 within Section VI of the preamble for this notice of proposed rulemaking, entitled, “The EPA’s Evaluation of Rule 425.”

H. Background Concentrations

The PRDNER developed background concentrations for the NAAs using hourly SO₂ measurements from 2007–

2009 at the Guayama SO₂ monitor, Air Quality System (AQS) number 72–057–0009.⁵⁹ Other SO₂ monitors, such as the Cataño (AQS ID 72–033–0004) or Bayamón (AQS ID 72–021–0010) monitors, are likely to be impacted by the PREPA facilities discussed here. This would result in double-counting of the impacts from those emissions, since the impacts from PREPA are modeled and the measured ambient data are added to the modeled impacts for a total concentration, which is compared to the NAAQS. The Guayama monitor is representative of the regional background and includes impacts from natural and man-made sources not explicitly included as sources in the modeling. The PRDNER used a design value from 2007–2009, since the more recent monitored data was incomplete and did not satisfy the EPA’s data completeness requirements. The EPA also recommended that for 2007, the PRDNER use the maximum daily value of 36 ppb, instead of the 99th percentile concentration of 6 ppb, since there were some missing values in the second quarter of 2007.

I. Summary of Results

Because a new attainment date will be established upon the EPA’s final determination that the NAAs failed to attain the standard by the mandatory attainment date of April 9, 2023, the EPA is not proposing action on the attainment demonstration portion of the PRDNER’s November 2022 SIP submission within this rulemaking. Instead, the EPA will address the PRDNER’s revised attainment demonstration following the SIP revision the PRDNER will be required to submit within 12 months of the EPA finalizing its determination that the areas failed to attain the standard.

VI. Review of Other Plan Requirements

A. Emissions Inventory

The emissions inventory and source emission rate data for an area serve as the foundation for air quality modeling and other analyses that enable states/territories to: (1) estimate the degree to which different sources within a NAA contribute to violations within the affected area, and (2) assess the expected improvement in air quality within the NAA as a result of the adoption and implementation of control measures. The state/commonwealth must develop and submit to the EPA a comprehensive, accurate, and current

inventory of actual emissions from all sources of SO₂ in each NAA, as well as any sources located outside the NAA that may affect attainment in the area.⁶⁰

The base year inventory establishes a baseline that is used to evaluate emission reductions achieved by the control strategy and to assess RFP requirements. In its submittal, the PRDNER used 2014 as the base year for emissions inventory preparation. 2014 data was used as the base year because SO₂ emissions data from this year was the most recently completed emissions data available for all sectors in the inventory. Data from 2014 was also representative of the emissions data that was used for the designations of the two SO₂ NAAs in Puerto Rico, which were based on emissions data between 2013 and 2015.

The PRDNER considered using 2017 as an emissions base year; however, it was determined that 2017 was not a representative year for fuel consumption due to the impacts from Hurricanes Irma and Maria. These hurricanes caused PREPA power plants, which generate electricity via the burning of fossil fuels and are the principal sources contributing to nonattainment in the San Juan and Guayama-Salinas areas, to be inoperative, or operate at reduced capacity, for several months. As a result, the PRDNER estimated that electrical generation was below fifty percent of the normal average in the last quarter of 2017.

The PRDNER utilized SO₂ actual emissions reported for the principal stationary point sources in the San Juan and Guayama-Salinas NAAs (*i.e.*, PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities), which were submitted under the SIP-approved RCAP Rule 410 (Maximum Sulfur Content in Fuels), and as a permit condition, which requires submission of certified annual reports to the PRDNER by PREPA. The PRDNER included the emissions calculations used to determine the actual SO₂ emissions using reported fuel usage data in its SIP submittal.⁶¹ The 2014 National Emissions Inventory (2014 NEI) was used for the other emission inventory sectors.

Table 8 summarizes the 2014 SO₂ base year emission inventory by sector for the San Juan NAA.

⁵⁸ Apart from Palo Seco Boiler 2, Power Block 2–2, and Power Block 3–2, the EPA is not aware of any other retirements that have been made according to the proposed schedule in the tables herein.

⁵⁹ This SO₂ monitor site closed on January 1, 2023.

⁶⁰ CAA section 172(c)(3), 42 U.S.C. 7502(c)(3).

⁶¹ Included in the appendix of the Baseline Emission Inventory 2014.

TABLE 8—BASE YEAR SO₂ EMISSIONS INVENTORY FOR THE SAN JUAN SO₂ NAA
[Tons per year]

Year	Stationary point sources	Stationary nonpoint sources	Stationary nonpoint events	Fuel combustion	Onroad mobile sources	Nonroad mobile sources
2014	8,262	37	<1	39	33	437

Table 9 summarizes the 2014 SO₂ base year emission inventory by sector for the Guayama-Salinas NAA.

TABLE 9—BASE YEAR SO₂ EMISSIONS INVENTORY FOR THE GUAYAMA-SALINAS SO₂ NAA
[Tons per year]

Year	Stationary point sources	Stationary nonpoint sources	Stationary nonpoint events	Fuel combustion	Onroad mobile sources	Nonroad mobile sources
2014	9,261	4	7	<1	3	<1

As shown in Tables 8 and 9, the majority of SO₂ emissions in the 2014 base year inventory can be attributed to the stationary point source category. Emissions for this category are provided in further detail in Table 10.

TABLE 10—BASE YEAR STATIONARY POINT SOURCE SO₂ EMISSIONS INVENTORY

Stationary point source	Nonattainment area	Emissions (tons per year)
PREPA Palo Seco	San Juan	3,128
PREPA San Juan	San Juan	5,135
PREPA Aguirre	Guayama-Salinas	9,261

A projected attainment year emissions inventory should also be included in the SIP submission, according to the 2014 SO₂ Guidance. This emissions inventory should include, in a manner consistent with the attainment demonstration, estimated emissions for all SO₂ sources that were determined to have an impact on the affected NAA for the projected attainment year.

In addition to the 2014 base year inventory of actual emissions, the PRDNER's submission included a projected emission inventory for the

PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities that includes allowable emissions from 2019 through 2029. The emissions projections represent current permit allowable emissions (2019–2022), emissions based on an interim remedy relying on the mandatory use of ULSD for certain units starting in February 2023, and emissions that provided for attainment of the 1-hour SO₂ NAAQS based on their final remedy (*i.e.*, emission unit retirements and fuel switching to ULSD or LNG from 2022–2029). Based on the schedule

for enforceable retirements, the final projected emissions occur through December 31, 2025, for PREPA Palo Seco and PREPA San Juan, and December 31, 2029, for PREPA Aguirre, which extends beyond the April 9, 2023 attainment date. The PRDNER did not include an emission inventory for the actual 2023 attainment deadline year.

Table 11 summarizes the PRDNER's projected emissions for the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities for 2019–2029.

TABLE 11—PROJECTED STATIONARY POINT SOURCE SO₂ EMISSIONS FOR 2019–2029
[Tons per year]

Stationary point source	Base potential to emit (PTE)	Interim PTE (2023)	Final PTE	Change (base to final)
PREPA Palo Seco	17,157	11,013	12	– 17,145
PREPA San Juan	10,215	9,496	43	– 10,172
PREPA Aguirre	31,246	19,199	4	– 31,242

The EPA has evaluated the PRDNER's 2014 base year inventory and the 2019–2029 projection year inventory. The EPA proposes to find the base year inventory and the methodologies used for its development consistent with the EPA's guidance. As a result, the EPA is

proposing to determine that the San Juan and Guayama-Salinas SO₂ nonattainment plan meets the requirements of CAA section 172(c)(3) for the San Juan and Guayama-Salinas SO₂ NAAs for its 2014 base year inventory.

As previously stated, the projected emissions inventory includes estimated emissions for SO₂ emission sources for a projected attainment year that extends beyond the CAA mandatory attainment date of April 9, 2023. That said, since a new attainment date will be

established following the EPA's final determination that the areas failed to attain the standard, the PRDNER will be expected to update the projection year emissions inventory in its subsequent SIP revision. The subsequent SIP revision will be required to be submitted within 12 months of a final determination on the EPA's proposed determination, in accordance with CAA section 179(d). Consequently, the EPA is not proposing action on the projection year emissions inventory in this rulemaking.

B. RACM and RACT and Enforceable Emission Limitations and Control Measures

CAA section 172(c)(1) states that nonattainment plans should "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." CAA section 172(c)(6) requires plans to "include enforceable emissions limitations, and such other control measures [. . .] as may be necessary or appropriate to provide for attainment of [the NAAQS]."

The necessary emissions limitations or other control measures in the PRDNER's 2022 submitted plan for attaining the 1-hour SO₂ NAAQS in the San Juan and Guayama-Salinas NAAs are based on emission unit retirements and fuel switching to ULSD. As previously mentioned, the enforceable control measures established in RCAP Rule 425 were to be implemented from June 30, 2023, through December 31, 2025, in the San Juan NAA, and December 31, 2025, through December 31, 2029, in the Guayama-Salinas NAA.

Rule 425 provides exemptions allowing for alternative retirement dates, provided they are approved by PRDNER and the PREB, but no later than December 31, 2025 for the San Juan NAA, and December 31, 2029 for the Guayama-Salinas NAA. As a result of these exemptions, the EPA believes the retirement dates listed under Rule 425 would not provide permanently enforceable measures for major sources of SO₂. The EPA anticipates that the PRDNER will remove these exemptions within the subsequent SIP revision that Puerto Rico will be required to submit within one year of the final determination of the EPA's proposed finding that the areas failed to attain the

standard by the statutory attainment date.

Because the San Juan and Guayama-Salinas NAAs will be subject to a new attainment date, which will be five years following the EPA's final determination that the areas failed to attain the standard, the EPA is not proposing action on the PRDNER's RACM/RACT and emissions limitations or control measures that were submitted in accordance with CAA sections 172(c)(1) and (6). As a result of this new attainment date, the EPA expects these elements will be revised within the subsequent SIP revision that the PRDNER will be required to submit within one year of the EPA's final finding that the areas failed to attain the standard. The EPA will act on these elements upon receipt of the PRDNER's subsequent SIP revision.

C. New Source Review

Part D of title I of the CAA prescribes the procedures and conditions under which a new major stationary source or major modification may obtain a preconstruction permit in an area designated nonattainment for any criteria pollutant. The nonattainment new source review (NNSR) permitting requirements in section 172(c)(5) and 173 of the CAA are among "the requirements of this part" to be submitted to the EPA as part of a revised SIP for a nonattainment area within 18 months of the effective date of a designation or redesignation to nonattainment. The NNSR permitting requirements provide for the permitting of any proposed major stationary source of SO₂ located in a NAA under the 2010 SO₂ NAAQS.

The PRDNER submitted its NNSR program's rules for SO₂ and other future potential nonattainment pollutants in its SIP submission to the EPA on November 22, 2022. Specifically, the PRDNER submitted⁶² for SIP approval, Rule 102, "Definitions," as amended, which includes definitions relevant to nonattainment; and Rule 210, "Nonattainment Provisions," which establishes the requirements necessary to construct or modify major emission sources of SO₂ and other pollutants in areas designated as NAAs.

The PRDNER's NNSR program rules are evaluated in Section VII, "Puerto Rico's New Source Review Program" of the preamble within this notice of proposed rulemaking. These rules

⁶²Rule 425, "Provisions for SO₂ Nonattainment Areas," which contains the emission limits and other control measures for the PREPA San Juan, PREPA Palo Seco, PREPA Aguirre facilities, as well as for the San Juan and Guayama-Salinas NAAs, is evaluated in Section VI.B of this notice.

provide appropriate new source review for SO₂ sources undergoing construction or major modification in the San Juan and Guayama-Salinas NAAs, including meeting the applicable statutory requirements, which include but are not limited to the installation of Lowest Achievable Emissions Rate (LAER) control technology and the acquisition of emissions reductions to offset new emissions of nonattainment pollutant(s). Based on the EPA's evaluation in Section VII, the EPA is proposing, upon final approval of the RCAP's Rules 102 and 210, that the new source requirements have been met for the San Juan and Guayama-Salinas NAAs.

D. Reasonable Further Progress

The EPA's policy that Reasonable Further Progress (RFP) for SO₂ may be satisfied by "adherence to an ambitious compliance schedule" is based on the fact that "for SO₂ there is usually a single 'step' between pre-control nonattainment and post-control attainment."⁶³ Because a new attainment date will be promulgated upon the EPA's final determination that the NAAs failed to attain the standard by the statutory attainment date, and the EPA expects this element will be revised by the PRDNER with the subsequent SIP revision required following the EPA's final determination, the EPA is not proposing action on the requirements listed under CAA section 172(c)(2), to provide for RFP toward attainment in the San Juan and Guayama-Salinas SO₂ NAAs.

E. Contingency Measures

As discussed in the EPA's SO₂ guidance, section 172(c)(9) of the CAA defines contingency measures as measures in a SIP that are to be implemented in the event an area fails to make RFP, or fails to attain the NAAQS, by the applicable attainment date. Contingency measures are to become effective without further action by the state/commonwealth or the EPA, where the area has failed to (1) achieve RFP or (2) attain the NAAQS by the statutory attainment date for the affected area. These control measures are to consist of other available control measures that are not included in the control strategy for the NAA SIP. The EPA's guidance describes special features of SO₂ planning that influence the suitability of alternative means of addressing the requirement in section 172(c)(9) for contingency measures for SO₂. Because SO₂ control measures are by definition based on what are directly and quantifiably necessary emissions

⁶³2014 SO₂ Guidance, at 40.

controls, any violations of the NAAQS are likely related to source violations of a source's permit terms. Therefore, an appropriate means of satisfying this requirement for SO₂ is for a state to have a comprehensive enforcement program that identifies sources of violations of the SO₂ NAAQS and to undertake an aggressive follow-up for compliance and enforcement.

For its contingency measures program, the PRDNER indicated it will continue to operate a comprehensive program to identify sources violating the SO₂ NAAQS, and that it will undertake compliance inspections and necessary enforcement actions.

In its submission to the EPA, the PRDNER clarified that it has authority under Article 9(a)(7) of the Puerto Rico Energy Public Policy Act (PREPPA) to order persons causing or contributing to a condition which harms the environment and natural resources, or which poses an imminent danger for the public health and safety, to immediately diminish or discontinue their actions. Furthermore, the PRDNER indicated that Article 9(a)(8) of PREPPA provides the PRDNER with the authority to issue orders to take the preventative or control measures necessary.

Accordingly, the PRDNER also included a provision that, upon notification by the PRDNER that a nearby monitor has four validated SO₂ concentrations in excess of the standard or has a monitored SO₂ violation based on the design value, PREPPA would be required to undertake a system audit of emissions units. Consequently, an audit report would be required for submission by PREPPA to the PRDNER within 90 days of the notification. An audit report would detail the operating parameters of all emissions units for four 10-day periods up to and including the date upon which the reference monitor registered each exceedance, together with recommended SO₂ emission control strategies, and evidence that the strategies have been deployed, as appropriate. Upon receipt of the report, the PRDNER would begin a 60-day evaluation period to diagnose the exceedance, to be followed by a 60-day consultation period with PREPPA to develop and implement necessary operational changes. The PRDNER indicated that such changes may include fuel switching, physical or operational reductions, or other changes that the PRDNER determined to be appropriate. Additionally, if any new emission limits were deemed necessary, the PRDNER indicated they would be submitted to the EPA as a SIP revision.

The PRDNER has also provided details on the corrective actions to occur

if emission sources do not comply with required emission limits and other requirements in Section VI of Rule 425. Specifically, this includes expedited procedures for establishing enforceable consent agreements when the adoption of revised SIPs is pending, and subjecting any source that is found to be in violation of an approved compliance plan or requirement within such plan to repercussions listed under Rule 115. Additionally, under Rule 425, the PRDNER indicated that if a new measure or control was determined to be sufficient to address violations of the SO₂ NAAQS and was promulgated or scheduled to be implemented at the federal or state level, additional local measures might be unnecessary following the PRDNER's submission of an analysis to the EPA demonstrating that such proposed measures were adequate to return an area to attainment. Under Rule 425, the PRDNER will also have the authority to require any owner or operator of an SO₂ emissions source contributing to air pollution to install, operate, and maintain monitoring devices; as well as maintain records and file periodic reports to the PRDNER. The PRDNER will also have the ability under Rule 425 to require the submission of an "Ambient Air Quality Monitoring Plan" that complies with the EPA's guidelines and includes an air quality and meteorological measurement network which collects accurate SO₂ air quality and meteorology data within the zone impacted by SO₂ emissions from a source. Finally, the PRDNER will have authority under Rule 425 to issue additional orders which require that a previously submitted plan be clarified, updated, corrected, supplemented, or otherwise amended.

The PRDNER also provided information regarding a proposed "Attainment Ambient Monitoring Network" (or AAMN). The PRDNER proposed that the AAMN would establish 12 SO₂ monitoring stations, with six in each of the two nonattainment areas. The location of these proposed stations would be determined based on an analysis that predicts the maximum concentrations using the EPA-approved AERMOD model. Additionally, the PRDNER indicated that the proposed SO₂ monitoring will be subject to 40 CFR part 58 requirements to be used for comparison to the NAAQS. The EPA did not approve any new SO₂ sites as part of PRDNER's 2023 AMNP.⁶⁴ Based

on the preliminary information provided, the EPA does not believe there is sufficient information to evaluate the appropriateness of the AAMN as part of the contingency measures for the plan.

Although Puerto Rico has taken significant steps to develop a comprehensive program to satisfy the contingency measures requirement for SO₂, the EPA's policy is premised on full compliance with the approvable controls and limits required in the approvable plan to ensure attainment. However, as previously discussed, the EPA is not proposing action on related CAA section 172(c) elements of the attainment plan, including the attainment demonstration, the RFP, and the RACM/RACT and enforceable emission limitation elements of the SIP, because Puerto Rico will be required to submit a revised SIP which the EPA anticipates will contain an updated control strategy based on the new attainment date that will be established with the EPA's final determination that the areas failed to attain the standard. Thus, the EPA is not proposing action on the contingency measures the PRDNER provided in its submission to satisfy section 172(c)(9), because the approvability of the contingency measures element depends upon the approvability of the attainment demonstration.

F. Conformity

Generally, as set forth in section 176(c) of the CAA, conformity requires that actions by federal agencies do not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS. General conformity applies to federal actions, other than certain highway and transportation projects, if the action takes place in a NAA or maintenance area (*i.e.*, an area which submitted a maintenance plan that meets the requirements of section 175A of the CAA and has been redesignated to attainment) for ozone, particulate matter, nitrogen dioxide, carbon monoxide, lead, or SO₂. The EPA's General Conformity Rule establishes the criteria and procedures for determining if a federal action conforms to the SIP.⁶⁵

With respect to the 2010 SO₂ NAAQS, federal agencies are expected to continue to estimate emissions for conformity analyses in the same manner as they estimated emissions for conformity analyses under the previous NAAQS for SO₂. The EPA's General

⁶⁴ See letter dated January 10, 2023, from Richard Ruvo, Director, EPA Region II, Air and Radiation Division to Anaís Rodríguez Vega, Secretary, Puerto

Rico Department of Natural and Environmental Resources.

⁶⁵ 40 CFR 93.150 to 93.165.

Conformity Rule includes the basic requirement that a federal agency's general conformity analysis be based on the latest and most accurate emission estimation techniques available.⁶⁶ When updated and improved emission estimation techniques become available, the EPA expects federal agencies will continue to use these techniques to ensure projects conform to the SIP.

The EPA concluded in its 1993 transportation conformity rule that highway and transit vehicles are not significant sources of SO₂. As a result, transportation conformity determinations are not required in SO₂ nonattainment and maintenance areas. Therefore, transportation plans, transportation improvement programs, and projects are presumed to conform to applicable implementation plans for SO₂.

VII. Puerto Rico's New Source Review Program

The PRDNER's permitting requirements for the preconstruction review of new major sources in NAAs are set forth in the revisions to Rule 102, "Definitions," and the newly adopted Rule 210, "Nonattainment Provisions." The PRDNER's NNSR program applies to the construction and modification of any major stationary source of air pollution in a NAA, as required by part D of title I of the CAA. To receive approval to construct, a source that is subject to these regulations must show that it will not cause a net increase in pollution with more than a 1:1 offset ratio, will not create a delay in meeting the NAAQS, and will install and use control technology that achieves the LAER. The revisions to Rule 102 and the newly created Rule 210 within the RCAP, which the EPA is proposing to approve into the SIP, incorporate provisions that are consistent with the current federal requirements for an approvable nonattainment NSR program in 40 CFR 51.165. Among these provisions is the prohibition of construction, unless an effective permit is issued that meets the requirements of Rule 210, and a certification from the applicant that all existing major stationary sources owned and operated by the applicant in Puerto Rico are complying with all applicable emissions standards of the CAA or that such stationary sources are in compliance with an expeditious schedule which is federally enforceable or contained in a court decree.

As part of its review of the PRDNER's NNSR submittal, the EPA has determined that the revisions are

consistent with the program requirements for the preparation, adoption, and submittal of implementation plans for NNSR, set forth at 40 CFR 51.165.

VIII. The EPA's Evaluation of Rule 425

On November 21, 2022, the PRDNER promulgated the new Rule 425, "Provisions for SO₂ Non-Attainment Areas." The new Rule 425 was included within the November 22, 2022 SIP revision submitted by the PRDNER.

The EPA is proposing to approve, for SIP-strengthening purposes and to make federally enforceable, the following sections of Rule 425: Section I, "Applicability;" Section IV, "Emission Limitations for San Juan and Guayama-Salinas Non-Attainment Areas," Section V, "Measurement methods and procedures," Subsections (A), (B), and (E); and Section VI, "Contingency Measures." Additionally, the EPA is proposing to conditionally approve Section II, "Emission Limitations for PREPA San Juan and PREPA Palo Seco," Subsection (A), Section III, "Emission Limitations for PREPA Aguirre," Subsection (A), Section V, "Measurement methods and procedures," Subsections (C), (D), and (F).

Rule 425 is applicable to the current and future owners or operators of the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities, as indicated under Section I, "Applicability" of Rule 425. Additionally, under Section I of Rule 425, any other major sources in or nearby the NAAs that have not undergone a major modification or construction of a new emission unit subject to Rule 210 are also subject to the provisions of Rule 425. The EPA proposes to approve the applicability provisions listed under Section I of Rule 425 for SIP-strengthening purposes.

Under Section II, "Emissions Limitations for PREPA San Juan and PREPA Palo Seco" and Section III, "Emission Limitations for PREPA Aguirre" of Rule 425, details are provided regarding compliance start dates for fuel switching to ULSD of certain emission units, retirement schedules for emission units not being converted to ULSD, and emission limits for units using ULSD or LNG at the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities. The EPA is proposing to conditionally approve the ULSD emission limits for units listed under Section II(A) and Section III(A) of Rule 425, which prevent the burning of any fuel oil above a maximum sulfur content of 15 ppm at the three aforementioned PREPA facilities, since fuel switching of emission units to

ULSD is expected to result in a significant decrease of sulfur emissions, providing for improved air quality. Details regarding the conditional approval and revisions the PRDNER has committed to make to Rule 425 as discussed in its September 2, 2024 commitment letter⁶⁷ are provided in the following paragraphs of this section. In accordance with section 110(k)(4) of the CAA, this proposed conditional approval is based on the PRDNER's commitment to make specific revisions to Section V of Rule 425, which will address concerns the EPA has regarding the enforceability of emission limits for the specific units listed under Section II(A) and Section III(A), and to submit such revisions to the EPA by January 1, 2026 for approval into the SIP for Puerto Rico.

The EPA is not proposing to approve and is taking no action on Section II(B) and Section III(B) of Rule 425, which list the retirement schedules for emission units and detail emission limits for units at the three PREPA facilities, since the EPA anticipates these schedules will be revised by Puerto Rico to conform with the updated control strategy submitted by the PRDNER in the subsequent SIP submission required under the CAA following the EPA's final determination that the areas failed to attain. Additionally, the retirement provisions within Section II(B) and Section III(B) of Rule 425 allow the PRDNER to request an alternate date, which provides exemptions to a control strategy and are therefore not a permanently enforceable control strategy.

In addition, under Section IV, "Emission Limitations for San Juan and Guayama-Salinas Non-Attainment Areas" of Rule 425, any emission source (or any nearby sources having a significant impact) within the boundaries of the San Juan and Guayama-Salinas NAAs, except for PREPA emission units, shall comply⁶⁸ with all the provisions within subsection IV(A). Thus, no owner or operator of any combustion units within the boundaries of the NAAs, or nearby sources having a significant air quality impact on SO₂, shall cause or permit the burning of any fuel oil above a maximum sulfur content of 0.0015

⁶⁷ Details regarding the EPA's conditional approval and the revisions which the PRDNER has committed to make to RCAP Rule 425 by January 1, 2026, can be found within the commitment letter the PRDNER submitted to the EPA on September 2, 2024, and which the EPA has included within the docket for this action.

⁶⁸ Emission sources are also required to comply with provisions provided under Rules 401 through 421 of the RCAP.

⁶⁶ 40 CFR 93.159(b).

percent by weight (15 ppm) by no later than April 9, 2023 (Sections IV(A)(1)–(2) of Rule 425). Under Section IV(B), owners or operators of stationary sources subject to the limitations of Section IV(A) are required to certify in writing to the PRDNER that such source complies with Rule 425. Finally, under Section IV(C), any owner or operator of a stationary source subject to the limitations of Section IV(A) that cannot comply with the emission limits established by the date required under Rule 425 shall create a compliance plan which implements RACT in accordance with Rule 205 and in compliance with Rule 425. Upon the PRDNER's approval, a compliance plan must then be implemented and certified by a responsible official for accuracy. The EPA is proposing to approve Section IV of Rule 425 for SIP-strengthening purposes, as it provides for the reduction of SO₂ emissions within the NAAs and provides air quality benefits.

Regarding the test methods to be utilized when determining compliance with the allowable emission limits listed under Rule 425, the PRDNER requires the use of test methods provided in 40 CFR part 60. Further detail regarding the test methods and procedures for PREPA to determine compliance with the allowable emission limit for any fuel other than coal at the PREPA facilities in San Juan, Palo Seco, and Aguirre is provided under Section V, "Measurement methods and procedures" of Rule 425. The EPA acknowledges the PRDNER's recommended on-site fuel sampling of ULSD (and LNG for PREPA San Juan) in accordance with USEPA Method 19, ASTM D2622, D4294, D5453, D7039, or other appropriate EPA or ASTM method. The EPA also acknowledges the requirement for the PREPA facilities to have monitors recording the amount of each fuel type burned at each emission unit on an hourly basis and the requirement for PREPA to sample each batch of fuel prior to use for sulfur content (percent by weight), heat value, and density. Additional provisions under Rule 425 concern sample submission for laboratory analysis and maintenance of laboratory analysis records for a period of at least five years. Under this rule, PREPA will also be required to maintain monthly records listing (a) the fuel used (hourly usage and total fuel used for the month), (b) sulfur content of the fuel, fuel density, fuel heating value, and the basis for the sulfur content used (fuel analysis showing the date the sample was collected, type of fuel, sulfur content, and fuel heating value), and (c) SO₂

emission rates (lb/hr) with the assumption that 100% of the sulfur in the fuel is converted to SO₂. Accordingly, the EPA proposes to approve Subsections (A), (B), and (E) of Section V under Rule 425 for SIP-strengthening.

Furthermore, under the current Section V of Rule 425, the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities (and any owner or operator of an SO₂ emission source subject to Rule 425) will be required to retain all data, calculations, and reports from any performance test or fuel sample developed for the purpose of demonstrating compliance with the applicable emission limits, emission tracking requirements, or emission rate limits, for a minimum of five years. Additionally, Section V will require that these records be made available for inspection to the PRDNER upon its request. Under Rule 425, the PRDNER will also have the authority to issue orders to require performance testing, fuel sampling, or require record-keeping and reporting of emission information.

The EPA is proposing to conditionally approve the reporting provisions under Rule 425, Section V, Subsections (C), (D), and (F), which only require an owner or operator of an SO₂ emission source in the NAAs to make records available for inspection purposes and following the PRDNER's request. Section V of Rule 425 includes provisions imposing monitoring and recordkeeping obligations on the relevant sources, such as performance and fuel testing, and retention of records needed to demonstrate compliance with the relevant emission limitations; however, the EPA is concerned that the absence of periodic reporting obligations under Subsections (C), (D), and (F) may interfere with enforcement of the rule. On September 2, 2024, the PRDNER submitted a letter committing to revise the reporting provisions under Subsections (C), (D), and (F) by January 1, 2026, which will require facilities subject to Rule 425 to submit reports semi-annually (*i.e.*, every six months). In accordance with section 110(k)(4) of the CAA, the EPA may conditionally approve a plan based on a commitment from a State/commonwealth to adopt specific enforceable measures and submit the necessary SIP revisions to the EPA by a date certain.

If this conditional approval is finalized as proposed, the conditionally approved provisions of Rule 425 will become part of the SIP and will be federally enforceable as of the effective date of the final conditional approval. If the PRDNER submits the revisions to Rule 425 by January 1, 2026, as

committed to in its September 2, 2024 commitment letter, the conditionally approved provisions will remain a part of the SIP unless the EPA disapproves the revisions to Rule 425 through notice-and-comment rulemaking. If the EPA takes final action approving the revisions to Rule 425 into the SIP, in the same final action, the EPA will also convert the conditional approval of Rule 425, Section V, Subsections (C), (D), and (F), to an approval by making appropriate revisions to the SIP in the Code of Federal Regulations. If the EPA disapproves the revisions to Rule 425 intended to satisfy the PRDNER's commitment, the conditional approval will convert to a disapproval, and the conditionally approved provisions of Rule 425 will no longer be a part of the approved SIP for Puerto Rico.

If the PRDNER fails to meet its commitment to submit the necessary SIP revisions to the EPA by January 1, 2026, or if the PRDNER submits timely SIP revisions, but the EPA finds the SIP submittal to be incomplete, this conditional approval will be converted to a disapproval. In either case, the EPA would notify the PRDNER by letter that the conditional approval has converted to a disapproval and the EPA would subsequently publish a document in the **Federal Register** announcing that the conditional approval converted to a disapproval.

As previously stated, the EPA is proposing to conditionally approve the ULSD emission limits described in Section II(A) and Section III(A) of Rule 425, since the emission limits provide for a significant decrease in sulfur emissions. The EPA is also proposing to conditionally approve the reporting provisions which apply to these limits described in Section V, Subsections (C), (D), and (F). The EPA, however, is not conditionally approving these sections for compliance with CAA section 172(c) requirements.

Finally, as previously discussed under Section VI.E, "Contingency Measures," of this preamble, Section VI, "Contingency Measures" of Rule 425 specifies corrective actions⁶⁹ to be taken if emission sources do not achieve compliance with emission limits

⁶⁹These provisions, which are more fully discussed by EPA in Section VI, subsection E of this proposed rulemaking, include expedited procedures for establishing enforceable consent agreements; repercussions for violations; assessing new measures; monitoring, reporting, and recordkeeping requirements; assessment of additional local measures; and the PRDNER's ability to require previously submitted plans to be clarified, updated, corrected, supplemented, or otherwise amended.

established in Rule 425 by the dates specified.

Moreover, in Section VI. E of this notice of proposed rulemaking, the EPA has indicated that the Agency is not proposing action on the contingency measures within the PRDNER's plan. That is because the EPA's policy is premised on full compliance with approvable controls and limits required in the approvable plan to ensure attainment. However, the EPA recognizes that the corrective actions outlined in Section VI of Rule 425 will have an overall positive impact on air quality in the San Juan and Guayama-Salinas NAAs. Therefore, the EPA is proposing to approve Section VI of Rule 425 for SIP strengthening and not to satisfy the contingency measure requirements of CAA 172(c)(9).

IX. Environmental Justice Considerations

The PRDNER did not provide any information within its November 22, 2022, SIP submittal to the EPA regarding environmental justice (EJ) considerations within the two NAAs. For informational purposes only, the EPA evaluated EJ considerations during its review of the PRDNER's SO₂ SIP submittal. The EPA did not rely on this information to reach any decisions described in this action. Notably, the CAA and applicable implementing regulations neither prohibit nor require such evaluation of EJ. The following information and discussion is provided for informational purposes only. An informational application of the White House's Climate and Economic Justice Screening Tool (CEJST)⁷⁰ produced information that indicates that nearly all census tracts (or 95% of the population) within Puerto Rico are considered disadvantaged.⁷¹

The evaluation here of environmental burdens and susceptible populations is based on screening-level analyses utilizing version 2.2 of the EPA's Environmental Justice Screening and Mapping Tool (EJScreen).⁷² EJScreen is the EPA's EJ screening and mapping tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic socioeconomic indicators. EJScreen is not a detailed risk analysis of EJ issues/concerns; rather, it is a

screening tool that examines some of the relevant issues related to EJ, and there is uncertainty in the data included.

Through its use of EJScreen, the EPA determined that there may be potential EJ concerns within both SO₂ NAAs and the areas within a 1-mile radius of the three PREPA facilities. The EJScreen Community Reports are provided in the docket for this action. The results of these analyses are being provided for informational and transparency purposes only.

In using EJScreen, if any of the EJ indices for the areas under consideration are at or above the 80th percentile nationally, then further review may be appropriate.⁷³ Thus, the EPA's discussion of EJScreen results will focus on bringing attention to indices at or above the 80th percentile. As discussed in the EPA's EJ technical guidance,⁷⁴ people of color and low-income populations often experience greater exposure and disease burdens than the general population, which can increase their susceptibility to adverse health effects from environmental stressors. Underserved communities can also experience reduced access to health care, nutritional, and fitness resources, further increasing their susceptibility.

Furthermore, the EJScreen tool provides information on 13 EJ Indices and 13 Supplemental Indices. Out of these, 11 indices have available data to derive in parts of Puerto Rico. Each index combines one environmental measure with demographic data⁷⁵ to characterize potential areas of EJ concern that may warrant further consideration, analysis, or outreach. The EJ indices help screen for potential EJ concerns and combine data on low-income and people of color populations with a single environmental indicator. The supplemental indices offer a perspective on community-level vulnerability and combine data on percent low-income, percent linguistically isolated, percent with less than a high school education, percent unemployed, and low life expectancy with a single environmental indicator. It is also possible to compare indices for

a given area to other locations within the nation and a State (or commonwealth). Specific background and source information on these indices and environmental indicators can be found in the EPA's "EJScreen Technical Documentation for Version 2.2."⁷⁶

The population living within the San Juan NAA has high (for the purpose of this discussion, at or above the 80th percentile) EJ and/or Supplemental Index values at the national and/or State (or commonwealth) level for 9 of the 11 indices available in EJScreen. These include Diesel Particulate Matter, Toxic Releases to Air, Traffic Proximity, Lead Paint, Superfund Proximity, RMP Facility Proximity, Hazardous Waste Proximity, Underground Storage Tanks, and Wastewater Discharge. While none of these indices have direct implications to SO₂ emissions, and are not at issue in the SIP submission, they highlight that there may be some potential EJ concerns within the area.

The population living within the Guayama-Salinas NAA also has high (for the purpose of this discussion, at or above the 80th percentile) EJ and/or Supplemental Index values at the national and/or State (or commonwealth) level for 6 of the 11 indices available in EJScreen. These include Air Toxics Cancer Risk, Toxic Releases to Air, Traffic Proximity, Lead Paint, Superfund Proximity, and Wastewater Discharge. While none of these indices have direct implications to SO₂ emissions, and are not at issue in the SIP submission, they highlight that there may be some potential EJ concerns within the area.

The EPA elected to conduct further analysis of the areas within a 1-mile radius of the three PREPA facilities (and within the NAAs) to ensure that the areas of maximum impact from emissions at the PREPA facilities were being considered.

The results in EJScreen for the areas within a 1-mile radius of both the PREPA San Juan and PREPA Palo Seco facilities indicated that the populations were in the 96th percentile for People of Color nationally (99 percent of the population in both of the areas within a 1-mile radius are considered People of Color). The area within a 1-mile radius of the PREPA San Juan facility is in the 97th percentile nationally for low income (81 percent of the population within a 1-mile radius of the PREPA San Juan facility is considered to be low-income), and the area within a 1-mile radius of the PREPA Palo Seco facility

⁷³ For early applications of EJScreen, the EPA identified the 80th percentile filter as the initial starting point for the purpose of identifying geographic areas that may warrant further consideration. In other words, an area with any of the 13 EJ indices at or above the 80th percentile nationally should be considered as a potential candidate for further review. See <https://www.epa.gov/ejscreen/how-interpret-ejscreen-data>.

⁷⁴ See <https://www.epa.gov/system/files/documents/2023-06/ejscreen-tech-doc-version-2-2.pdf>.

⁷⁵ Demographic and socioeconomic data utilized within EJS is obtained from the U.S. Census Bureau's American Community Survey (ACS) 2017–2021 5-Year Estimates.

⁷⁶ See <https://www.epa.gov/system/files/documents/2023-06/ejscreen-tech-doc-version-2-2.pdf>.

⁷⁰ See <https://screeningtool.geoplatform.gov/en/#/33.47/-97.5>.

⁷¹ A census tract is considered disadvantaged if it meets the thresholds for at least one of the tool's categories of burden or it is on the lands of a federally recognized Tribe. Additional information on the categories of burden can be found at <https://screeningtool.geoplatform.gov/en/methodology>.

⁷² See <https://www.epa.gov/ejscreen>.

is in the 76th percentile (46 percent of the population within a 1-mile radius of the PREPA Palo Seco facility is considered to be low-income). The population living within a 1-mile radius of the PREPA San Juan facility is at or above the 90th percentile for EJ and/or Supplemental Index values at the national and/or State (or commonwealth) level for all 11 available indices in EJScreen. The population living within a 1-mile radius of the PREPA Palo Seco facility is at or above the 80th percentile for EJ and/or Supplemental Index values at the national and/or State (or commonwealth) level for 7 of the 10 available indices. In addition, the population within the Guayama-Salinas NAA, and within a 1-mile radius of the PREPA Aguirre facility, are both in the 98th percentile nationally for People of Color (with 100 percent of the population considered People of Color), and in the 96th percentile nationally for low-income (with 78 percent of the population considered low-income).

Based on all the screening-level demographic and socioeconomic data previously detailed, the populations within both NAAs and within a 1-mile radius of the three PREPA facilities are predominately made up of people of color and/or low-income individuals. As a result, conditions that exist prior to this action have the potential to result in disproportionate and adverse effects on communities with EJ concerns.

The reliability of Puerto Rico's energy infrastructure has been impacted by a combination of factors, including its vulnerability to severe storms and an aging fossil fuel-reliant generation fleet. After Hurricane Maria in 2017, Puerto Rican households experienced the largest and longest blackout in U.S. history, and the second-longest blackout in the world, with 80 percent of the island's power lines leveled.⁷⁷ Moreover, Puerto Rico's fleet of fossil fuel generators is the oldest in the United States, with an average age of 44 years as compared with the national average of 18 years.⁷⁸ Notably, although the poverty rate in Puerto Rico is more than three times the national average, Puerto Ricans pay an average of almost twice as much for electricity as U.S. mainland customers.⁷⁹ The average

price of electricity in 2022 across all sectors (residential, commercial, and industrial) in Puerto Rico averaged 29.63 cents/kWh, which is higher than every U.S. State except Hawaii (and excluding other U.S. Territories).⁸⁰

The EPA anticipates that its proposed conditional approval of the use of ULSD at the three PREPA facilities will not negatively impact energy reliability for citizens within the NAAs. The lower sulfur content in ULSD (15 ppm) has the potential to reduce harmful emissions from nonroad diesel sources by more than 90%.⁸¹ Thus, the anticipated significant reduction in sulfur content, compared to the sulfur content of diesel fuel previously used at the three PREPA facilities, is expected to result in approximately 15,000 tons of projected SO₂ reductions annually that will bring the NAAs closer to attainment of the NAAQS.⁸² At a minimum, this action is not expected to worsen any existing air quality, and the EPA believes that this proposed action will provide benefits to communities living within the NAAs, as it will provide for emission reductions along with ensuring the continued operation of existing electric generating units at the PREPA facilities.

Public participation and community involvement are crucial for ensuring that decisions affecting human health and the environment advance environmental justice considerations. Communities affected by environmental justice issues often face many challenges and barriers associated with meaningful involvement and adequate representation in the development, implementation, and enforcement of environmental laws, regulations, and policies. Consequently, to provide ample time for meaningful involvement, the EPA will extend its comment period for this notice of proposed rulemaking (NPRM) from the customary 30 days to 60 days.

Additionally, as previously detailed within this NPRM, to provide effective and meaningful involvement from community members during the comment period for this NPRM, the EPA will hold public information sessions concerning this proposed rulemaking. Given the high percentage of households whose primary language is

Spanish, the EPA intends to provide all public distributions and supporting and related materials for this rulemaking that are legally permitted to be translated, in both Spanish and English, to the best of its ability. A Spanish translator will also be present at these public information sessions to ensure participants are able to understand the information provided by the EPA. The EPA will announce the date, time, and location for each session on its website. These sessions will allow citizens an opportunity to learn more about this proposed action, which will enhance their ability to provide more informed official comments during the public comment period. See the Supplementary Information section for additional information regarding the Public Information Sessions.

As previously stated, this analysis of EJ considerations was done solely for the purpose of providing additional context and information about this proposed rulemaking to the public and is not a basis for the action. The EPA is taking action under the CAA and on bases independent of EJ.

X. The EPA's Proposed Action

First, the EPA proposes, under CAA section 179(c)(1), to determine that the San Juan and Guayama-Salinas areas failed to attain the 2010 1-hour SO₂ standard by the statutory attainment date of April 9, 2023. This determination is based upon a weight-of-evidence analysis, including (1) the control strategy timeline Puerto Rico identified and adopted into its RCAP and submitted in support of its air quality dispersion modeling of its November 22, 2022 SIP revision, which did not provide for attainment by the statutory attainment date; (2) Puerto Rico's inability to effectively implement the control strategy it identified and adopted within a timely manner thus far; and (3) the EPA's review of annual facility-wide emissions data from January 2020 through December 2022 for the PREPA San Juan, PREPA Palo Seco, and PREPA Aguirre facilities located within the NAAs.

If the EPA's determination is finalized as proposed, the Commonwealth of Puerto Rico will be required under CAA section 179(d) to submit revisions to the SIP for the San Juan and Guayama-Salinas SO₂ NAAs. The required SIP revision for each area must, among other elements, demonstrate expeditious attainment of the standards within the time period prescribed by CAA section 179(d). If the EPA's determination is finalized as proposed, the SIP revisions required under CAA section 179(d) will be due for submittal to the EPA no later

⁷⁷ See <https://www.fema.gov/disaster/4339>.

⁷⁸ See Jones, G., *The Future of Energy in Puerto Rico: Current Challenges and Opportunities for a Resilient Power Grid*. On Behalf of the U.S. Environmental Protection Agency, Region 2 Brownfields Program (2021/12/15), <https://www.bu.edu/rccp/files/2022/01/Energy-Resilience-in-Puerto-Rico.pdf>.

⁷⁹ See U.S. Energy Information Administration, "Puerto Rico, Territory Profile and Energy

Estimates," available at https://www.eia.gov/state/?sid=RQ#:-:text=Puerto%20Rico%27s%20reliance%20on%20petroleum,fired%20power%20plantandhttps://www.eia.gov/electricity/annual/html/epa_02_10.html.

⁸⁰ See U.S. Energy Information Administration, "State Energy Profiles, Puerto Rico," available at <https://www.eia.gov/beta/states/states/RQ/data>.

⁸¹ See <https://www.epa.gov/diesel-fuel-standards/diesel-fuel-standards-and-rulemakings>.

⁸² See docket for projected SO₂ emission reductions.

than one year after the publication date of the final action notice.

Second, the EPA proposes to approve certain but not all elements of Puerto Rico's SIP submission, submitted to the EPA by the PRDNER on November 22, 2022. Specifically, the EPA is proposing to approve the following elements for compliance with the requirements of section 172(c) of the CAA: Puerto Rico's NNSR program, the base year emissions inventory, and to affirm that the NNSR requirements for the NAAs have been met. If finalized, this action would incorporate RCAP amendments under Rules 102 and 210 into Puerto Rico's approved and federally enforceable SIP.

The EPA is not proposing action on other remaining elements within Puerto Rico's November 22, 2022 submission, as a result of the anticipated revisions to the SIP, which Puerto Rico would be required to submit within one year of the publication date of the final action pursuant to CAA section 179(d), should the EPA finalize its determination that the areas failed to meet the attainment date of April 9, 2023. The EPA is therefore not proposing action on the PRDNER's attainment demonstration, contingency measures, RACM/RACT and emission limitations necessary for attainment, as well as the requirements for meeting RFP toward attainment of the NAAQS.

Additionally, the EPA proposes to approve, in part, and conditionally approve, in part, and not for compliance with the CAA section 172(c) requirements, specific amendments to Rule 425 of Puerto Rico's RCAP, which include control measures, emission limitations, and reporting requirements for sources in the NAAs. Specifically, the EPA is proposing to approve for SIP-strengthening, the following sections of Rule 425: Section I, "Applicability;" Section IV, "Emission Limitations for San Juan and Guayama-Salinas Non-Attainment Areas;" Section V, "Measurement methods and procedures," Subsections (A), (B), and (E); and Section VI, "Contingency Measures." Moreover, the EPA is proposing to conditionally approve Section II, "Emission Limitations for PREPA San Juan and PREPA Palo Seco," Subsection (A), Section III, "Emission Limitations for PREPA Aguirre," Subsection (A), Section V, "Measurement methods and procedures," Subsections (C), (D), and (F).

The EPA is soliciting public comments on this proposed action. The EPA will accept comments from the public on this proposal for the next 60 days and will consider these comments before taking final action.

XI. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule, regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference Puerto Rico's RCAP, Rule 102, "Definitions," and Rule 210, "Non-Attainment Provisions," as well as portions of Rule 425, "Provisions for SO₂ Non-Attainment Areas," with a State/commonwealth effective date of November 21, 2022, and as described in Sections VI through VIII of this preamble.

Specifically, the EPA is proposing to incorporate by reference the following sections of Rule 425: Section I, "Applicability"; Section II, "Emission Limitations for PREPA San Juan and PREPA Palo Seco," Subsection (A); Section III, "Emission Limitations for PREPA Aguirre," Subsection (A); Section IV, "Emission Limitations for San Juan and Guayama-Salinas Non-Attainment Areas;" Section V, "Measurement methods and procedures;" and Section VI, "Contingency Measures." These documents are available in the docket of this rulemaking through www.regulations.gov.

XII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review, and Executive Order 14094: Modernizing Regulatory Review

This action is not a significant regulatory action as defined in Executive Order 12866, as amended by Executive Order 14094, and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA because this action does not impose additional requirements beyond those imposed by State law.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities beyond those imposed by State/commonwealth law.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C.1531–1538, and does not significantly or uniquely affect small governments. This action does not impose additional requirements beyond those imposed by State/commonwealth law. Accordingly, no additional costs to State, local, or Tribal governments, or to the private sector, will result from this action.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Coordination With Indian Tribal Governments

This action does not have Tribal implications, as specified in Executive Order 13175, because the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction and will not impose substantial direct costs on Tribal governments or preempt Tribal law. Thus, Executive Order 13175 does not apply in this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2–202 of the Executive order. This action is not subject to Executive Order 13045 because it does not impose additional requirements beyond those imposed by State/commonwealth law.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

Section 12(d) of the NTTAA directs the EPA to use voluntary consensus standards in its regulatory activities

unless to do so would be inconsistent with applicable law or otherwise impractical. The EPA believes that this action is not subject to the requirements of section 12(d) of the NTTAA because application of those requirements would be inconsistent with the CAA.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, February 16, 1994) directs federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. The EPA defines EJ as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” The EPA further defines the term “fair treatment” to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.”

The PRDNER did not evaluate environmental justice considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. Consistent with the EPA’s discretion under the CAA, the EPA evaluated the environmental justice considerations of this action, as is described above in the section titled, “Environmental Justice Considerations.” The analysis was done for the purpose of providing additional context and information about this rulemaking to the public, and not as a basis of the action. Due to the nature of the action being taken here, this action is expected to have a neutral to positive impact on the air quality of the affected area. In addition, there is no information in the record inconsistent with the stated goal of E.O. 12898 of achieving environmental justice for communities with environmental justice concerns.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by

reference, Intergovernmental relations, Sulfur dioxide, Reporting and recordkeeping requirements.

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

Lisa Garcia,

Regional Administrator, Region 2.

[FR Doc. 2024–22466 Filed 9–30–24; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 281 and 282

[EPA–R04–UST–2024–0279; FRL–12181–01–R4]

North Carolina: Final Approval of State Underground Storage Tank Program Revisions, Codification, and Incorporation by Reference

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The State of North Carolina (North Carolina) has applied to the Environmental Protection Agency (EPA) for final approval of revisions to its Underground Storage Tank Program (UST Program) under subtitle I of the Resource Conservation and Recovery Act (RCRA). Pursuant to RCRA, the EPA is proposing to approve revisions to North Carolina’s UST Program. This action is based on the EPA’s determination that the State’s revisions satisfy all requirements for UST program approval. This action also proposes to codify North Carolina’s revised UST Program and to incorporate by reference the State statutes and regulations that we have determined meet the requirements for approval.

DATES: Comments on this proposed rule must be received on or before November 1, 2024.

ADDRESSES: You may send comments, identified by Docket ID No. EPA–R04–UST–2024–0279, by either of the following methods:

- *Federal eRulemaking Portal:* <https://www.regulations.gov> (our preferred method). Follow the online instructions for submitting comments.
- *Email:* giri.upendra@epa.gov. Include the Docket ID No. EPA–R04–UST–2024–0279 in the subject line of the message.

Instructions: Submit your comments, identified by Docket ID No. EPA–R04–UST–2024–0279, via the Federal eRulemaking Portal at <https://www.regulations.gov>. Follow the online instructions for submitting comments.

Once submitted, comments cannot be edited or removed from <https://www.regulations.gov>. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit: <https://www.epa.gov/dockets/commenting-epa-dockets>.

The EPA encourages electronic submittals and lists all publicly available docket materials electronically at <https://www.regulations.gov>. If you are unable to make electronic submittals or require alternative access to docket materials, please contact Upendra Giri, the contact listed in the **FOR FURTHER INFORMATION CONTACT** provision below. The index of the docket and all publicly available docket materials for this action are available for review at <https://www.regulations.gov>.

Please also contact Upendra Giri if you need assistance in a language other than English or if you are a person with disabilities who needs a reasonable accommodation at no cost to you. For further information on EPA Docket Center services, please visit us online at <https://www.epa.gov/dockets>.

FOR FURTHER INFORMATION CONTACT: Upendra Giri, RCRA Programs and Cleanup Branch, Land, Chemicals, and Redevelopment Division, U.S. Environmental Protection Agency, Region 4, Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960; Phone number: (404) 562–8185, email address: giri.upendra@epa.gov. Please contact Upendra Giri by phone or email for further information.

SUPPLEMENTARY INFORMATION: For additional information, see the direct final rule published in the “Rules and Regulations” section of this **Federal Register**.