

APPENDIX N

AGREED ORDER 2021-0508-MIS

Rusk-Panola Attainment Demonstration State
Implementation Plan for the 2010 Sulfur Dioxide
National Ambient Air Quality Standard

Project Number 2020-057-SIP-NR

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN
AGREED ORDER CONCERNING
LUMINANT GENERATION COMPANY
LLC,
MARTIN LAKE STEAM ELECTRIC
STATION

CN 603256413
RN 102583093

ACCOUNT NO. RL-0020-K

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BEFORE THE

TEXAS COMMISSION

ON

ENVIRONMENTAL QUALITY

**AGREED ORDER
DOCKET NO. 2021-0508-MIS**

The Texas Commission on Environmental Quality (Commission or TCEQ) and Luminant Generation Company LLC (Luminant or the Company) enter into this Agreed Order for the purpose of supporting attainment and maintenance of the 1-hour sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS) as required by the Federal Clean Air Act (FCAA).

The Executive Director of the Commission (the Executive Director) and the Company have agreed on the commitments documented in this Agreed Order to support attainment and maintenance of the 2010 1-hour SO₂ NAAQS (2010 1-hour SO₂ NAAQS or SO₂ NAAQS), subject to the approval of the Commission.

The Commission hereby orders the Company, and the Company agrees, that it shall comply with the requirements contained in this Agreed Order from the facility or facilities referenced below, pursuant to §§382.011, 382.012, 382.023, and 382.024, of the Texas Clean Air Act (TCAA or the Act), Texas Health & Safety Code, Chapter 382, and the FCAA, 42 United States Code (U.S.C.), §§7401 *et seq.*, for the purpose of supporting attainment and maintenance of the SO₂ NAAQS.

I. STIPULATIONS

For the purpose of this Agreed Order, the parties have agreed and stipulated as follows:

1. Section 109 of the FCAA, 42 U.S.C., §7409, requires the United States Environmental Protection Agency (EPA) to set NAAQS for the protection of public health and welfare.
2. The EPA originally established the NAAQS for SO₂ in 1971, effective upon publication, as published on April 30, 1971, 36 *Fed. Reg.* 8186. The EPA last revised the SO₂ primary standard effective August 23, 2010, as published on June 22, 2010, 75 *Fed. Reg.* 35520. The EPA retained the primary standard without revision effective April 17, 2019, as published on March 18, 2019, 84 *Fed. Reg.* 9866.
3. Section 110 of the FCAA, 42 U.S.C., §7410 requires Texas to provide for attainment and maintenance of the NAAQS.
4. Section 172 of the FCAA, 42 U.S.C., §7502 requires that all SIPs contain nonattainment plan provisions for areas designated nonattainment for any NAAQS.
5. Section 172(c)(1) of the FCAA, 42 U.S.C., §7502(c)(1) requires that all nonattainment plans include provisions requiring reductions in emissions from existing sources in the area from the application of all Reasonably Available Control Measures (RACM), including Reasonably Available Control Technology (RACT).
6. Section 172(c)(2) of the FCAA, 42 U.S.C., §7502(c)(2) requires that all nonattainment plans include provisions requiring reasonable further progress (RFP) toward attainment.
7. Section 172(c)(9) of the FCAA, 42 U.S.C., §7502(c)(9) requires that all nonattainment plans include provisions requiring that specific measures be implemented if the area fails to make reasonable progress or to attain the NAAQS by the relevant attainment date.
8. Sections 191 and 192 of the FCAA, 42 U.S.C., §§7514 and 7514a specify additional provisions for areas designated nonattainment for sulfur oxides, nitrogen dioxide, or lead.
9. Sections 382.011 and 382.012 of the TCAA provide authority for the Commission to control the quality of the state's air and prepare and develop a general, comprehensive plan for the proper control of the state's air; and §§382.023, and 382.024 of the TCAA provide the Commission with authority to issue orders. The Commission and the Company agree that issuance of this Agreed Order complies with the TCAA.

10. The Commission and the Company agree that the Commission has jurisdiction to enter this Agreed Order, and the Company is subject to the Commission's jurisdiction.
11. The Commission and the Company acknowledge that Luminant has entered into this Agreed Order voluntarily and not as the result of any enforcement action. This Agreed Order makes no findings regarding Company compliance or non-compliance, and nothing in this Agreed Order shall be interpreted as evidence that the Company is either in compliance or is in any respect non-compliant with any federal, state, or local law.
12. This Agreed Order shall not be considered as part of the Company's compliance history under 30 Texas Administrative Code (T.A.C.) Chapter 60 or the Commission's Penalty Policy, except that if the Company is subject to enforcement action for failure to comply with this Agreed Order, any such violation shall be subject to the TCEQ rules regarding Compliance History in 30 T.A.C. Chapter 60.
13. Nothing in this Agreed Order supersedes any requirement of the TCAA or the rules and requirements of the Commission except as explicitly provided herein.
14. Portions of Rusk and Panola Counties, which includes the Martin Lake Steam Electric Station, were designated nonattainment for the 2010 1-hour SO₂ NAAQS by the EPA, effective January 12, 2017, as published in the Federal Register on December 13, 2016, 81 *Fed. Reg.* 89870 (Rusk-Panola SO₂ Nonattainment Area).
15. The Company owns and operates the Martin Lake Steam Electric Station located at 8850 FM 2658 North, Tatum, Rusk County, Texas.
16. The Company and the Commission agree that the emissions limitations provided in this Agreed Order provide the most efficient mechanism to demonstrate attainment and maintenance of the 2010 1-hour SO₂ NAAQS. If commitments such as those provided in this Agreed Order were not implemented, the commission would need to evaluate potential controls applied through other mechanisms, such as rulemaking, as part of the nonattainment plan required by Section 172 of the FCAA, 42 U.S.C., §7502.
17. The State of Texas and Luminant each filed petitions for review of EPA's nonattainment designations with respect to Rusk and Panola Counties in the Fifth Circuit Court of Appeals, No 17-60088. Those challenges remain pending before the Court.
18. TCEQ and Luminant petitioned EPA to reconsider the designation for Rusk and Panola Counties. On September 21, 2017, EPA responded to Luminant's petition for reconsideration and explained that it "intend[ed] to undertake an administrative action with notice and comment to revisit the nonattainment designation for the portions of . . . Rusk and Panola Counties[.]"

19. On August 22, 2019, EPA proposed an Error Correction in the *Federal Register*, 84 Fed. Reg. 43,757, to correct the previous designation for Rusk and Panola Counties for the SO₂ NAAQS to be unclassifiable rather than nonattainment. On June 29, 2021, EPA published a withdrawal of its Error Correction for Rusk and Panola Counties for the SO₂ NAAQS in the *Federal Register*, 86 Fed. Reg. 34187. On the same day, EPA published in the *Federal Register*, 86 Fed. Reg. 3414, a notice that it had denied the petitions for reconsideration submitted by TCEQ and Luminant in letters to the relevant parties.
20. On August 10, 2020, EPA published a Finding of Failure to Submit for Texas with respect to certain nonattainment areas, including Rusk and Panola Counties, for the 2010 1-hour SO₂ NAAQS that became effective on September 9, 2020, 85 *Fed. Reg.* 48,111.
21. Based on the currently effective nonattainment designation for Rusk and Panola Counties, under FCAA §172, the nonattainment plan for areas designated nonattainment must include, among other things, enforceable emission limitations, and such other control measures, means, or techniques as necessary to provide for attainment of the 2010 1-hour SO₂ NAAQS.
22. The Martin Lake Steam Electric Station consists of one or more sources as defined in TCAA, §382.003(12), including three (3) coal-fueled Electric Generating Facility (EGF) boilers, designated as:
 - a. Emission Point Number (EPN) S-1 (Steam Generator Unit No. 1);
 - b. EPN S-2 (Steam Generator Unit No. 2); and
 - c. EPN S-3, (Steam Generator Unit No. 3).

Flue gas desulfurization (FGD) systems are used to control SO₂ emissions from all three EGF boilers.
23. The Martin Lake Steam Electric Station consists of one or more sources as defined in TCAA, §382.003(12), including two (2) auxiliary boilers, designated as:
 - a. EPN S-1A and B, Auxiliary Boiler A; and
 - b. EPN S-1A and B, Auxiliary Boiler B.
24. The EGF boilers described above in Provision No. I.22 and the auxiliary boilers described in Provision No. I.23 are authorized to emit air contaminants as specified in the new source review (NSR) permit listed below:
 - a. NSR Permit 933, last revised on August 13, 2015.
25. The EGF boilers described above in Provision No. I.22 and the auxiliary boilers described in Provision No. I.23 are also authorized under Federal Operating Permit (FOP) 53 issued on January 8, 2014. Unless otherwise specified, all

references in this Agreed Order are for the NSR and Federal Operating permits listed above.

26. As part of the required attainment demonstration for the Rusk-Panola SO₂ Nonattainment Area, considered concurrently by the Commission with this Agreed Order, the Commission has performed dispersion modeling that demonstrates that the emission limitations specified in this Agreed Order result in attainment and maintenance of the 2010 1-hour SO₂ NAAQS within the Rusk-Panola SO₂ Nonattainment Area.
27. The Company agrees to the emission limits and compliance requirements (monitoring, recordkeeping, reporting, and testing) specified in Provision No. II.1 and 2 of this Agreed Order. Additionally, the requirements specified in Provision Nos. II.1 and 2 of this Agreed Order are designed to meet the requirements of the FCAA, §172(c)(1), 42 U.S.C., 7502(c)(1), for SO₂ RACT and RACM and the requirements of FCAA, §172(c)(2), 42 U.S.C., §7502(c)(2) for RFP for the Rusk-Panola SO₂ nonattainment area, as determined by the Commission in the attainment demonstration considered concurrently with this Agreed Order.
28. This Agreed Order does not authorize or prohibit any modification of the facility or facilities listed above, as long as such modification does not conflict with Provision Nos. II.1 or 2 of this Agreed Order. This Agreed Order does not prohibit the non-substantive renumbering or reorganization of the provisions of NSR Permit No. 933 or Federal Operating Permit 53.
29. The emissions limitations specified in Provision No. II.1 of this Agreed Order are expected to reduce the allowable SO₂ emissions from the Martin Lake Steam Electric Station by over 98,000 tons per year, which is a reduction of over 70% from current emissions allowable levels.
30. The Company and Commission agree that this Agreed Order may only be modified, revised, amended, or otherwise superseded by agreement of the Commission, and the Company. Additionally, the Company and Commission agree that if this Agreed Order is approved by EPA as part of the Texas SIP, any modification, revision, amendment, or other changes to make the Agreed Order less stringent may not be made effective without EPA approval of concomitant revisions to the SIP in accordance with Section 110 of the FCAA.

II. ORDER

In accordance with the Stipulations noted above, it is therefore ordered by the Commission that:

1. No later than the date by which the State of Texas is required to demonstrate compliance with the 2010 1-hour SO₂ NAAQS for the Rusk-Panola SO₂ Nonattainment Area:

- a) For the EGF boiler units specified in Provision No. I.22 of this Order, the Company shall:
 - i) Burn only subbituminous coal, No. 2 fuel oil, or natural gas;
 - ii) Limit the firing rate (when fired) for all three EGF boiler units to a combined rate not to exceed 27,000 million British thermal units (MMBtu) per hour (the firing rate is an operating cap for all three EGF boiler units combined); and
 - iii) Optimize the FGD systems to ensure compliance with a combined SO₂ emission rate not to exceed 7,305 lb/hr on a block 24-hour average basis for the three EGF boiler units (the 7,305 lb/hr is an emission cap for all three EGF boiler units combined). The emission cap of 7,305 lb/hr applies at all times when fuel of any type is fired in any EGF boiler unit.
 - b) For the Auxiliary Boilers specified in Provision No. I.23 of this Order, the Company shall:
 - i) Fire only No. 2 fuel oil with a sulfur content of 0.10% by weight or less;
 - ii) Not exceed an SO₂ emission rate of 51.46 lbs/hr on a one-hour basis and 22.54 tpy on an annual basis, combined for the two Auxiliary Boilers (the 51.46 lbs/hr and 22.54 tpy are emission caps for the two auxiliary boilers combined); and
 - iii) Comply with a 10 percent annual capacity factor for each of the two Auxiliary Boilers. Annual capacity factor is the ratio between the actual heat input from all fuels burned during a calendar year and the potential heat input had the boiler been operated for 8,760 hours during a year at the maximum steady state design heat input capacity. The 10 percent annual capacity factor limit corresponds to a heat input of 219,000 MMBtu per calendar year, per Auxiliary Boiler.
2. The Company shall demonstrate compliance with this Order as described in subparagraphs (a) – (e) below.
- a) The Company shall submit the appropriate application documentation to the TCEQ for authorization, if any, necessary to implement the requirements of this Agreed Order. The Company shall apply for the appropriate revision to NSR Permit 933 within 90 days of the effective date of EPA's approval of TCEQ's SIP revision for the Rusk and Panola Counties nonattainment area, incorporating the applicable requirements of Provision Nos. II.1 and 2 consistent with the terms of this Order.
 - i) The application shall also include any other necessary proposed changes to permit terms or requirements to incorporate all emission limits, operational, monitoring, recordkeeping, reporting, and testing requirements and other requirements to implement this Order.

- ii) The issued permit shall also include a special condition in NSR Permit 933 that identifies the provisions of this Order as RACT/RACM in support of the Rusk-Panola Attainment Demonstration for the 2010 SO₂ NAAQS and states that neither the Company nor TCEQ will make changes to, or otherwise modify, provisions of NSR Permit 933 or FOP 53 that incorporate the control obligations of this Order to make the obligations less stringent without prior written Commission and EPA approval.
- b) The Company shall submit the necessary applications to have any revised applicable requirements incorporated into Federal Operating Permit 53 consistent with state and federal rules.
- c) For each of the EGF boiler units specified in Provision No. I.22 of this Agreed Order, the Company shall keep records and demonstrate compliance with the obligations specified in Provision No. II.1.a, as specified below:
 - i) SO₂ emissions shall be calculated using CEMS data obtained in accordance with the procedures specified in 40 C.F.R. Part 75, on an hourly basis. The block 24-hour average SO₂ emission rate shall be calculated as the arithmetic mean of all the hourly SO₂ emissions from the three EGF boiler units combined, except as noted below. A block 24-hour average shall be calculated for each 24-hour period, beginning at 12 am midnight and continuing through 12 am midnight of the next day, provided that fuel was combusted in any EGF boiler unit. In order to constitute a qualifying hour, it shall not be necessary for fuel to be combusted by any single EGF boiler unit or by the combined three units for the entire hour. Non-operating hours, in which none of the EGF boiler units emits SO₂, shall be excluded from the calculation of the block 24-hour average. Each block 24-hour average shall include all emissions that occur during all periods of operation, including startup, shutdown, and malfunction. The 24-hour average SO₂ emission rate shall be calculated based upon CEMS time, which does not observe daylight savings time. During periods that a CEMS is out of service or data from the CEMS is missing, emissions shall be calculated using the methods contained in 40 C.F.R. Part 75, or other methods as agreed upon by TCEQ and the Company and approved by EPA. The measurements missed and methods used to estimate emissions shall be recorded and kept as specified in this Agreed Order.
 - ii) The Company shall keep records each month of:
 - (1) each block 24-hour average SO₂ emission rate, measured in lb/hr, for the combined three EGF boiler units; and
 - (2) hourly combined heat input, in MMBtu/hr, for the three EGF boiler units.
- d) For the Auxiliary Boilers specified in Provision No. I.23 of this Agreed Order, the Company shall keep records and demonstrate compliance with the obligations specified in Provision No. II.1.b, based at a minimum on fuel usage, sulfur content of the fuel oil, and the SO₂ emission factor from AP-42, Table 1.3-1, version dated May, 2010 as specified below:

- i) The Company shall monitor the sulfur content of the liquid fuel in accordance with fuel sampling requirements specified in 40 CFR Part 75, Appendix D, 2.2 Oil Sampling and Analysis. Vendor fuel certification receipts may be used to comply with this condition.
 - ii) Compliance with SO₂ emissions limits shall be determined based on fuel usage, sulfur content of the fuel oil, and the SO₂ emission factor from AP-42, Table 1.3-1, version dated May 2010.
 - iii) The Company shall keep records each month, and on a rolling 12-month basis, of the:
 - (1) type of fuel used and the results of fuel oil sampling or vendor fuel certification receipts;
 - (2) amount of fuel oil used on an hourly basis during periods that the auxiliary boiler is operated; and
 - (3) heat input for each auxiliary boiler.
 - e) Records shall be kept for a period of 5 years and, at the request of the TCEQ Executive Director, the EPA, or any other air pollution program having jurisdiction, the Company shall provide a sample and/or analysis of the fuel oil, allow the air pollution control agency representatives to obtain a sample for analysis, or provide access to records as requested.
3. Once the provisions of this Order are incorporated into permits as required in Provision Nos. II.2.a and II.2.b, if a violation of the requirements of the permit provisions incorporating the requirements of Provision Nos. II.1 or II.2.c occurs, the Commission will cite violations of the permit provisions and not of the provisions of this Agreed Order and any administrative penalties for noncompliance would be assessed based on the permit violations only.
 4. If the Company fails to comply with any provision of this Agreed Order, and that failure is caused solely by an act of God, war, strike, riot, or other event beyond the control of the Company or its affiliates or contractors, the Company's failure to comply is not a violation of this Agreed Order. The Company shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. The Company shall notify the Executive Director within seven days after the Company becomes aware of any such event and shall take all reasonable measures to mitigate and minimize the failure to comply.
 5. The provisions of this Agreed Order shall apply to, and be binding upon, the Company, its successors, assigns, and upon those persons in active concert or participation with them who receive actual notice of this Agreed Order by personal service or otherwise. The Company is hereby ordered to give notice of this Agreed Order to any successor in interest prior to transfer of ownership of all or any part of the Martin Lake Steam Electric Station, located at 8850 FM 2658 North, Tatum, Rusk County, Texas, and within ten (10) days of any such transfer, provide the TCEQ with written certification of such transfer, and that such notice has been given.

6. Upon the effective date of a determination by the U.S. EPA that the Rusk-Panola nonattainment area has failed to attain the 2010 1-hour SO₂ NAAQS pursuant to FCAA § 179(c), 42 U.S.C. §7509(c), the Deputy Director of the Air Quality Division (AQD Deputy Director) of the TCEQ will notify the Company of the failure to attain and that the contingency measures in this paragraph are triggered. Once notification is received from the TCEQ, the Company shall perform a full system audit (FSA) of all emissions units of SO₂ located at the Martin Lake Steam Electric Station.
 - a) Within 90 calendar days of receipt of the notification, the Company shall submit the FSA, including recommended provisional SO₂ emission control strategies as necessary, to the AQD Deputy Director of the TCEQ.
 - b) As part of the FSA, the Company shall conduct a root cause analysis of the circumstances surrounding the cause of the determination of failure to attain, including a review and consideration of, at a minimum, hourly mass emissions of SO₂ on a block 24-hour average from the three coal-fueled EGF boiler units specified in Provision No. I.22 of the Agreed Order; each of the auxiliary boilers specified in Provision No. I.23 of the Agreed Order; the meteorological conditions recorded at the monitor or other relevant meteorological data, including the frequency distribution of wind direction temporally correlated with SO₂ readings greater than 75 ppb at the monitor for which the EPA's determination of failure to attain was made; and any exceptional event that may have occurred. The root cause analysis and associated records used to conduct the audit shall consider information on the days that monitored exceedances occurred during the time period that the EPA evaluated in making the failure to attain determination.

7. Notification points of contact:

For Luminant Generation Company LLC:

Cynthia Vodopivec
Senior Vice President
6555 Sierra Drive
Irving, Texas 75039

For TCEQ:

Donna F. Huff
Deputy Director, Air Quality Division
P.O. Box 13087
MC-206
Austin, Texas 78711-3087

8. If any portion of this Agreed Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

For the Commission
Jon Niermann
Chairman
Texas Commission on Environmental Quality

Date

I, the undersigned, have read and understood the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity indicated below my signature, and I do agree to the specified terms and conditions.

Cynthia Vodopivec
Senior Vice President
Luminant Generation Company LLC

Date of Signature

Erin E. Chancellor
Director
Office of Legal Services
Texas Commission on Environmental Quality

Date of Signature