

# STATE OF NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD

### IN THE MATTER OF PROPOSED NEW REGULATION,

20.2.101 NMAC – Carbon Dioxide Emission Standards for Coal Fired Electric Generating Facilities

No. EIB 22-28 (R)

# NEW MEXIO ENVIRONMENT DEPARTMENT'S NOTICE OF INTENT TO PRESENT REBUTTAL TECHNICAL TESTIMONY

Pursuant to 20.1.1.302 NMAC and the *Amended Order of Hearing Determination, Hearing Officer Appointment, and Scheduling Pre-Filed Technical Testimony* issued by the Environmental Improvement Board on August 18, 2022, the New Mexico Environment Department ("Department" or "NMED") submits this Notice of Intent to Present Rebuttal Technical Testimony for the hearing in this matter currently scheduled to begin on October 26, 2022.

## 1. Entity for whom the witnesses will testify

The witnesses will testify for the Air Quality Bureau of the Environmental Protection Division of the Department.

## 2. Identity of witnesses

The Department will call the following witnesses as a panel to present rebuttal and surrebuttal technical testimony at the hearing. Their combined rebuttal testimony is attached as NMED Exhibit 28.

<u>Elizabeth Bisbey-Kuehn</u> is the Bureau Chief of the Department's Air Quality Bureau. Her resume is attached as NMED Exhibit 6.

Robert Spillers is an Environmental Scientist and Specialist-Advanced within the Department's Air Quality Bureau. His resume is attached as NMED Exhibit 14.

Michael G. Baca is the Staff Manager for the Control Strategies Section within the

Department's Air Quality Bureau. His resume is attached as NMED Exhibit 2.

3. Estimated duration of direct oral testimony of witnesses

Pursuant to the *Procedural Order* issued by the Hearing Officer on October 5, 2022, each

witness will be limited to no more than 30 minutes to summarize their direct and rebuttal testimony

at the hearing.

4. List of exhibits to be offered by the Department at the hearing

An updated list of exhibits that the Department intends to offer into evidence in this matter

is attached to this Notice. The Department reserves the right to call any additional witnesses to

provide surrebuttal testimony, and introduce and move for admission of any other exhibit in

support of surrebuttal testimony, at the hearing in this matter.

Respectfully submitted,

NEW MEXICO ENVIRONMENT DEPARTMENT

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## NMED Rebuttal Exhibit List – EIB 22-28 (R)

NMED Exhibit 1	Written Direct Testimony of Liz Bisbey-Kuehn
NMED Exhibit 2	Resume of Liz Bisbey-Kuehn
NMED Exhibit 3	Written Direct Testimony of Michael Baca
NMED Exhibit 4	Resume of Michael Baca
NMED Exhibit 5	Listserv Announcement for proposed Part 101 informal public comment period
NMED Exhibit 6	Informal public comment draft of proposed Part 101
NMED Exhibit 7	Department PowerPoint Presentation at June 23, 2022 Public Meeting
NMED Exhibit 8	Stakeholder Comments Submitted through the Department's Comment Portal
NMED Exhibit 9	Proposed Part 20.2.101 NMAC – 09-14-2022 DRAFT
NMED Exhibit 10a-j	Public Notice of Proposed Rulemaking
NMED Exhibit 11	Part 101 Flyer and Factsheet
NMED Exhibit 12a-e	Distribution of Part 101 Flyer and Factsheet to Stakeholders
NMED Exhibit 13	Listserv Announcement for Public Stakeholder Engagement Event
NMED Exhibit 14	Social Media Posts for Public Stakeholder Engagement Event
NMED Exhibit 15a-b	Public Stakeholder Engagement Sign-In Sheet and Virtual Registration List
NMED Exhibit 16	Department Part 101 PowerPoint Presentation – September 1, 2022 Public Meeting
NMED Exhibit 17	Written Direct Testimony of Robert Spillers
NMED Exhibit 18	Resume of Robert Spillers
NMED Exhibit 19	40 CFR Part 72.2 – Acid Rain Program General Provisions

NMED Exhibit 20	40 CFR Part 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units
NMED Exhibit 21	Federal Register Notice - Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units - Proposed Rule, 79 Fed. Reg. 1430 (January 8, 2014)
NMED Exhibit 22	Federal Register Notice - Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34960 (June 18, 2014)
NMED Exhibit 23	Federal Register Notice - Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units – Final Rule at 80 Fed. Reg. 64510 (October 23, 2015)
NMED Exhibit 24	40 CFR Part 75 - Continuous Emission Monitoring
NMED Exhibit 25	40 CFR Part 98 - Greenhouse Gas Reporting
NMED Exhibit 26	Part 101 – Subpart TTTT Cross Reference
NMED Exhibit 27	Continuous Emissions Monitoring System Illustration
NMED Exhibit 28	Rebuttal Testimony of Liz Bisbey-Kuehn, Robert Spillers, and Michael Baca
NMED Exhibit 29	Proposed Part 20.2.101 NMAC – 10-12-2022 DRAFT

#### CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing New Mexico Environment Department's Notice of Intent to Present Rebuttal Technical Testimony was served via electronic mail to the following parties of record on October 12, 2022:

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# STATE OF NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD

## IN THE MATTER OF PROPOSED NEW REGULATION,

20.2.101 NMAC – Carbon Dioxide Emission Standards for Coal-Fired Electric Generating Facilities

No. EIB 22-28 (R)

## REBUTTAL TESTIMONY OF LIZ BISBEY-KUEHN, ROBERT SPILLERS, AND MICHAEL BACA

1	This reduttal testimony responds to the technical testimony and proposed revisions
2	submitted by Clean Air Advocates ("CAA"). In this rebuttal testimony, we will address
3	recommended language revisions proposed in the direct testimony of Bruce Buckheit ("Buckheit
4	Direct") submitted on behalf of CAA. The Department's recommended revisions to proposed
5	20.2.101 NMAC ("Part 101") are discussed in detail below for each applicable section. All
6	revisions to Part 101 proposed by the Department as part of this rebuttal testimony are included
7	in NMED Exhibit 29 – Proposed Part 20.2.101 NMAC (October 12, 2022) – Redline.
8	As explained in the direct testimony of Robert Spillers (NMED Exhibit 17), the
9	Department developed the compliance monitoring, recordkeeping, and reporting provisions of
10	proposed Part 101 based on federal air quality regulations promulgated by the U.S.
11	Environmental Protection Agency ("EPA") establishing carbon dioxide
12	("CO2") emission standards at coal-fired power plants. The federal regulations include
13	continuous emission monitoring ("CEMS") requirements found at 40 CFR Part 75 - Continuous
14	Emission Monitoring ("Part 75") (NMED Exhibit 24); greenhouse gas reporting requirements
15	found at 40 CFR Part 98 - Greenhouse Gas Reporting (NMED Exhibit 25); and regulatory
16	language for electric generating units found at 40 CFR Part 60, Subpart TTTT – Standards of

1	Performance for Greenhouse Gas Emissions for Electric Generating Units ("Subpart TTTT")
2	(NMED Exhibit 20).
3	The Department agrees with certain revisions proposed by CAA, and these revisions are
4	included in NMED Exhibit 29. The Department disagrees with certain revisions proposed by
5	CAA, as discussed in each applicable Section below. Lastly, the Department does not take a
6	position on CAA's remaining proposed revisions, and notes as much in each applicable Section.
7	These remaining proposals, while not necessarily problematic from a technical or regulatory
8	perspective, go beyond the current federal regulatory framework and requirements for CO <sub>2</sub>
9	emission standards at coal-fired power plants upon which the Department's proposals are based.
10	As such, the Department believes it is the Board, as the policy-making body, that should make
11	the decision after hearing and considering the testimony and evidence presented by the experts
12	for the other parties.
13	During the stakeholder engagement process, the Department encouraged the other parties
14	in this rulemaking to discuss CAA's proposals and endeavor to come to agreement where
15	possible. The Department intends to support any joint proposal offered by the other parties that
16	addresses and resolves whether the remaining revisions proposed by CAA should be
17	incorporated into Part 101.
18	CAA'S PROPOSED REVISIONS TO PART 101
19	20.2.101.7 - Definitions
20	Subsection D. "Electric generating facility" ("EGF")

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CAA proposes to revise the definition of EGF to expand the type of equipment listed to

include air pollution control devices and equipment used to separate, compress, and transport

- 1 CO<sub>2</sub> or other pollutants to an offsite location. The Department agrees with this proposal and
- 2 recommends that the Board adopt the CAA's proposed definition.
- 3 <u>Subsection E. Definition of "Megawatt-Hour (MWh)"</u>
- 4 CAA proposes to revise the definition of "Megawatt-Hour (MWh)" to strike the term
- 5 "total gross energy output (Pgross)" and insert the term "net generation." This revision is part of
- 6 CAA's broader request to base the emission standard on net generation rather than gross energy
- 7 output, as proposed by the Department. The Department takes no position on this requested
- 8 revision and recommends that the Board decide whether or not to revise this definition based on
- 9 the testimony of the other parties.
- On page 22 of Mr. Buckheit's testimony, he states that "[t]he statute does not require the
- rule to use gross energy output, and it is not appropriate to do so." Mr. Buckheit is correct that
- the authorizing provision of the Air Quality Control Act at Section 74-2-5(B)(1)(b) does not
- specify any definition of Megawatt-Hour; in fact, the statute does not provide any guidance with
- respect to the use of gross energy output versus net generation.
- The Department notes that the use of the term "net generation" in CAA's proposed
- definition does not align with Subpart TTTT, EPA's corresponding regulation for electric
- 17 generating facilities, which relies upon total gross energy output for compliance determinations.
- During EPA's multi-year regulatory development process for Subpart TTTT, EPA conducted
- 19 extensive stakeholder engagement which included requesting and responding to comments on
- applicable sections of the proposed regulation. EPA sought comments from stakeholders on the
- 21 use of net output-based standards during the rulemaking on Subpart TTTT, and ultimately
- decided to base the emission standard on a gross energy output, as shown in NMED Exhibit 21,

1	p. 1447. EPA discusses their rationale for deciding to use gross energy output vs. net energy
2	output in NMED Exhibit 23, p. 64535-36.
3	Subsection F. – Definition of "Operating Month"
4	CAA proposes to strike the term "operating month" and replace it with the term
5	"operating day" to support CAA's proposed new definition of rolling average and revisions to
6	the emission standard itself, as discussed below. This proposed revision is part of CAA's broader
7	request to revise the emission standard to be based upon a 365-operating day rolling average
8	basis instead of a 12-operating month rolling average basis, as proposed by the Department. The
9	Department does not take a position on this requested revision and recommends that the Board
10	decide whether to revise this definition based on the testimony of the other parties.
11	Subsection I. – Definition of "Rolling Average"
12	CAA proposes to add a new term "rolling average," and a new definition of that term.
13	This proposed term is part of CAA's broader request to revise the emission standard to be based
14	upon a 365-operating day rolling average basis instead of a 12-operating month rolling average
15	basis, as proposed by the Department. The Department does not take a position on the requested
16	new definition and recommends that the Board decide whether to adopt this definition based on
17	the testimony of the other parties.
18	Mr. Buckheit explains his rationale for the new proposed definition as follows:
19 20 21 22 23 24 25 26	"Rolling average" means the weighted average of all data, meeting quality assurance and quality control requirements normalized pursuant to this Part, collected during the applicable averaging period. A 365-operating-day rolling average is calculated by adding the hourly mass emissions over the previous 365 operating days and dividing that sum by the hourly generation (MWh-net) during the same period. A 30-operating-day rolling average is calculated by adding the hourly mass emissions over the previous 30 operating days and dividing that sum by the hourly generation (MWh-net) during the same period.

1	Mr. Buckheit points out that the statute only specifies an emission standard, and does not provide
2	an averaging time required for the emission calculation. Mr. Buckheit goes on to state there is no
3	need for a short-term emission limit, as there is no demonstrated need for short term limits for
4	greenhouse gases (GHG). On page 17 of his testimony, Mr. Buckheit raises the concern that a
5	longer averaging period could allow an owner or operator to violate the emission standard
6	without having to perform a corrective action. In order to address this concern, Mr. Buckheit
7	proposes that the standard have a shorter averaging period, such that an owner or operator could
8	be made aware of violations and take corrective action addressing the violation in a more timely
9	manner.
10	The Department notes that this proposal is inconsistent with EPA's averaging period for
11	the CO <sub>2</sub> emission standard for coal-fired power plants subject to the requirements of Subpart
12	TTTT. During EPA's multi-year rulemaking process for Subpart TTTT, EPA requested
13	comments on the appropriateness of a 12-operating month rolling average for the emission
14	standard. See NMED Exhibit 21, p.1482. In the Federal Register notice for the proposed rule,
15	EPA included the following statement regarding the rationale for using this averaging period:
16 17 18 19 20 21	This 12-operating month period is important due to the inherent variability in power plant GHG emissions rates. Establishing a shorter averaging period would necessitate establishing a standard to account for the conditions that result in the lowest efficiency and therefore the highest GHG emissions rate. EGU efficiency has a significant impact on the source's GHG emission rate.
22	See NMED Exhibit 22, p. 34985. In the final regulation, EPA detailed the rationale for using a
23	12-operating month rolling average period, stating:
24 25 26 27 28	Commenters supported the use of a 12-operating-month rolling average for the compliance period for the final standards. In response, this final rule specifies that compliance with the 1,400 lb CO <sub>2</sub> /MWh-g emission limit is determined on a 12-operating-month rolling average basis, updated after each new operating month. For each 12- operating-month compliance period, quality-assured data from the

1 2 3	certified Part 75 monitoring systems is used together with the gross output over that period of time to calculate the average CO <sub>2</sub> mass emissions rate.
4	See NMED Exhibit 23, p. 64625.
5	20.2.101.112 – Emission Standard
6	Emission Standard
7	CAA proposes to insert an additional zero at the end of the proposed CO <sub>2</sub> emission
8	standard, effectively changing the emission standard from "1,100 pounds CO2" to "1,100.0
9	pounds CO <sub>2</sub> ."
10	The Department does not agree with this proposal, as it does not believe it is within the
11	Board's discretion to modify the statutory language of the emission standard established in
12	Section 74-2-5(B)(1)(b). In addition, the Board's air quality regulations at Part 20.2.1 NMAC
13	already include provisions for significant figures for emission limits. Lastly, EPA notes that
14	"[n]umerical values of 1,000 or greater have a minimum of 3 significant figures and numerical
15	values of less than 1,000 have a minimum of 2 significant figures." See NMED Exhibit 23,
16	Subpart TTTT at p. 64658, Note - Table 1. Therefore, the current proposed emission standard
17	aligns with the statutory language, the Board's regulations, and EPA's emission standard for
18	similar sources, and should not be revised.
19	Emission Standard Averaging Period
20	CAA proposes to strike the term "12-month" and add the terms "365-" and "day" to
21	Section 112. This requested revision is part of CAA's broader proposal to revise the averaging
22	period of the emission standard from a 12-operating month rolling average basis, to a 365-
23	operating day rolling average basis. The Department does not take a position on this requested
24	revision and recommends that the Board decide whether to revise this language based on the
25	testimony of the other parties. As noted above, during EPA's multi-year rulemaking process for

1	Subpart TTTT, EPA requested comments on the appropriateness of a 12-operating month rolling
2	average for the emission standard. EPA ultimately retained the 12-operating month rolling
3	average in the final regulation. See NMED Exhibit 21, p.1482.
4	New Calculation Requirement for Emission Standard
5	CAA proposes to insert a new requirement for owners and operators to quantify any CO <sub>2</sub>
6	emissions exiting the facility via pipeline or other conveyance system to a CO <sub>2</sub> injection or
7	sequestration facility, in order to determine compliance with the emission standard.
8	CAA proposes the following language as the second-to-last sentence in Section 20.2.101.112:
9 10 11 12	This calculation shall include all CO <sub>2</sub> entering the emission stack monitoring point, minus any CO <sub>2</sub> entering a permitted pipeline or other conveyance to a permitted CO <sub>2</sub> injection and sequestration facility. The emission stack monitoring point shall be located upstream of any CO <sub>2</sub> capture equipment at the site.
13	CAA is proposing that owners or operators determine compliance with the emission standard by
14	(1) determining the CO <sub>2</sub> emissions entering the emission stack monitoring point, which is located
15	upstream of any CO <sub>2</sub> capture equipment at the site, and (2) subtracting the quantity of CO <sub>2</sub>
16	emissions entering the pipeline, injection, or sequestration facility. The proposed language
17	identifies the points at a facility where CO2 should be measured and provides a basis for
18	accounting for fugitive emissions within the facility. This measurement configuration would
19	allow for the calculation of the actual CO <sub>2</sub> emissions leaving the facility. The Department does
20	not take a position on this requested revision and recommends that the Board decide whether to
21	revise the standard based on the testimony of the other parties.
22	CAA proposes to insert the term "net" in the last sentence of Section 112. This proposal
23	is part of CAA's broader request to base the emission standard on net generation rather than
24	gross energy output, as proposed by the Department. The Department does not take a position on
25	this requested revision and recommends that the Board decide whether to add this term based on

1	the testimony of the other parties. The Department notes that the addition of this term does not
2	align with Subpart TTTT.
3	CAA proposes to strike the phrase "regardless of whether or how the electricity is used."
4	This proposed deletion is part of CAA's broader request to base the emission standard on net
5	generation rather than gross energy output. The Department does not take a position on this
6	requested revision and recommends that the Board decide whether to strike this language based
7	on the testimony of the other parties. The Department notes that the striking of this language
8	does not align with Subpart TTTT.
9	20.2.101.113 MONITORING REQUIREMENTS
10	Subsection A
11	CAA proposes to insert the statement "of this Section" in the first sentence of Subsection
12	A. The Department agrees with the additional proposed language and recommends that the
13	Board adopt the requested language.
14	CAA proposes to insert "upon written approval by the Department" in the second
15	sentence of Subsection A. The Department does not agree with this proposal, which would
16	require the Department review and approve an owner or operator's monitoring plan in writing.
17	The Department's proposed language in Subsection 20.2.101.113.A requires monitoring
18	plans to be prepared according to the requirements of Part 75 (EPA's Continuous Emission
19	Monitoring regulations). Part 75 was developed by EPA to establish requirements for monitoring
20	and recordkeeping of air pollutants emitted from power plants in support of EPA's Acid Rain
21	Program ("ARP"). The Part 75 regulations consist of eight subparts based on the purpose and
22	applicability of the regulations, requirements relevant to each pollutant, missing data procedures,
23	certification and recertification requirements, and recordkeeping and reporting policies. Part 75

I	also includes ten appendices that contain requirements for continuous emissions monitoring
2	systems ("CEMS") and data calculation guidelines based on pollutant and fuel type.
3	Part 75 establishes extensive requirements for compliance with the ARP, including
4	continuous monitoring and reporting of sulfur dioxide ("SO2"), CO2, and nitrogen oxides ("NOx")
5	emissions. Most owners and operators comply with this requirement through the use of CEMS
6	which monitor the amount of pollution emitted from a smokestack (pollutant concentration) and
7	the volume of exhaust gases (stack gas volumetric flow rate). Part 75 also specifies quality
8	assurance and quality control tests to ensure the CEMS is operating properly.
9	The requirements under Part 75 already provide sufficient regulatory oversight of the
10	monitoring, recordkeeping, and proper operation of CEMS. Additional review and approval of
11	the monitoring plan would unnecessarily burden the Department's limited staffing resources
12	without corresponding environmental or regulatory benefits.
13	Subsection B – Paragraph (1)
14	CAA proposes to strike the final three sentences of Paragraph (1) of Subsection B of
15	Section 113. Those sentences provide as follows:
16 17 18 19 20 21 22 23 24 25	As an alternative to direct measurement of the CO <sub>2</sub> concentration, provided that the affected EGU does not employ carbon separation (e.g., carbon capture and storage), owners or operators may use data from a certified oxygen (O <sub>2</sub> ) monitor to calculate the hourly average CO <sub>2</sub> concentration in accordance with 40 CFR Part 75.10(a)(3)(iii). If the CO <sub>2</sub> concentration is measured on a dry basis, owners or operators shall also install, certify, operate, maintain, and calibrate a continuous moisture monitoring system, in accordance with 40 CFR Part 75.11(b). Alternatively, owners or operators may either use an appropriate fuel-specific default moisture value from 40 CFR Part 75.11(b) or submit a petition to the Department for a site-specific default moisture value.
26	The Department proposed this rule language based on similar rule language in Subpart TTTT.
27	See NMED Exhibit 20. This rule language allows owners and operators to use an alternative

1	means to directly measure CO <sub>2</sub> concentrations at facilities that do not use carbon capture and
2	sequestration.
3	The Department does not take a position on this requested revision and recommends that
4	the Board decide whether to strike this language based on the testimony of the other parties. The
5	Department notes that removing this language is inconsistent with Subpart TTTT, which
6	provides this alternative regulatory requirement for sources not employing CCS.
7	Subsection B – Paragraph (2)
8	CAA proposes to add the following language to the first sentence of Subsection
9	20.2.101.113.B(2) requiring owners and operators to install a CEMS to monitor and record the
10	CO <sub>2</sub> emissions leaving the facility:
11 12 13	Owners or operators shall install, certify, operate, maintain, and calibrate a CEMS to directly measure and record the hourly average CO <sub>2</sub> mass leaving the facility in a permitted pipeline or other conveyance to a permitted CO <sub>2</sub> injection facility.
14	This proposed language is part of CAA's broader request to determine compliance with the
15	emission standard by quantifying and subtracting the quantity of CO <sub>2</sub> emissions leaving the
16	facility, as previously discussed.
17	The Department does not take a position on this requested revision and recommends that
18	the Board decide whether to adopt this language based on the testimony of the other parties.
19	Subsection B – Paragraph (3)
20	CAA proposes to replace the term "unadjusted" with "adjusted" in the first sentence of
21	Paragraph (3); strike the term "not" in the second sentence of Paragraph (3); and insert the
22	statement "that fully reflect the documented bias in the CEM" in the second sentence of
23	Paragraph (3).

1	Subpart TTTT specifically directs owners or operators <i>not</i> to apply bias adjustment
2	factors in the identical requirement in the federal regulation. Bias is the systematic or persistent
3	distortion of a measurement process which causes error in one direction. Bias is determined by
4	estimating the positive and negative deviation from the true value as a percentage of the true
5	value. As stated previously, the Department relied upon the requirements of Subpart TTTT to
6	develop the monitoring requirements proposed in Part 101, and EPA does not require the use of
7	bias for calculations used in determining compliance with Subpart TTTT. See NMED Exhibit 23
8	p. 64,624. As EPA explained when it proposed Subpart TTTT:
9 10 11 12 13 14 15	[Subpart TTTT] requires only those operating hours in which valid data are collected and recorded for all of the parameters in the CO <sub>2</sub> mass emission rate equation to be used for calculating compliance with applicable emission limits. Additionally, for EGUs using CO <sub>2</sub> CEMS, only unadjusted stack gas flow rate values should be used in the emissions calculations. In this rule, part 75 bias adjustment factors (BAFs) should not be applied to the flow rate data. These restrictions on the use of part 75 data for part 60 compliance are consistent with previous NSPS regulations and revisions.
16	As noted above, EPA directs owners or operators not to use bias adjustment factors for valid data
17	and use only unadjusted stack flow rates.
18	The Department does not take a position on these requested revisions and recommends
19	that the Board decide whether to revise the rule language based on the testimony of the other
20	parties. The Department notes that CAA's proposed language does not align with the
21	requirements established in Subpart TTTT.
22	Subsection B – Paragraph (4)
23	CAA proposes several significant revisions to Subsection 20.2.101.113.B(4), including
24	the following: (1) requiring owners and operators to solicit the advice of staff from the National
25	Institute of Standards and Technology ("NIST") regarding the most appropriate technologies for
26	reference method testing to set up the flow monitor and perform ongoing RATA tests; (2)
27	requiring submittal of all corresponding communication to the Department; (3) requiring owners

- and operators to request approval from the Department of an alternative procedure or technology
- 2 if an owner or operator declines to follow the NIST staff recommendations; and (4) requiring
- 3 owners or operators to use a NIST traceable calibration of the pitot tube or pitot tube assembly.
- 4 The Department disagrees with these proposals.
- 5 CAA proposes to revise Subsection 20.2.101.113.B(4) as follows:

Owners or operators shall solicit the advice of appropriate staff at the National Institute for Standards and Technology (NIST) as to the most accurate commercially available techniques and technologies for reference method testing select and appropriate reference method to set up the flow monitor and perform the ongoing Relative Accuracy Test Audit (RATA), in accordance with 40 CFR Part 75 and shall provide a copy of all communications with NIST staff relating to stack flow monitoring to the Department. If an owner or operator declines to follow the NIST staff recommendations, the owner or operator shall request Department approval of alternate procedures and technologies. If owners or operators use a Type-S pitot tube or a pitot tube assembly for the flow RATA, owners or operators shall ealibrate arrange for NIST traceable calibration of the pitot tube or pitot tube assembly. Owners or operators may not use the 0.84 default Type-S pitot tube coefficient specified in Method 2.

NIST is a physical sciences laboratory and non-regulatory agency of the U.S. Department of Commerce. Its mission is to promote American innovation and industrial competitiveness, not develop environmental regulatory requirements. EPA is the federal regulatory agency that establishes requirements for the development and use of federal reference methods to determine compliance with federal air quality standards. EPA has a formal process for developing, revising, and updating new and existing federal reference methods and provides a process for regulated owners or operators to propose an alternative testing method. The Department, along with all other state air regulatory agencies, relies on EPA's technical and regulatory expertise in reviewing and approving appropriate reference and testing methods for compliance with federal air quality emission standards and permit requirements.

The requirement to consult NIST staff and arrange for NIST traceable calibration is beyond the scope of this rulemaking, and the Department does not support prescriptive language

- directing owners or operators to solicit outside advice regarding techniques or technologies for
- 2 CEMS or other measurement and data collection systems. The Department based the monitoring
- 3 requirements of Part 101 on identical federal requirements found in Part 75 for the Relative
- 4 Accuracy Test Audit. EPA worked extensively to develop these requirements that are currently
- 5 required for CEMS in the ARP. These are standardized published referenced methods that are
- 6 used throughout the country. While the use of an alternative method may provide more accurate
- 7 information, alternative methods that have not gone through EPA's rigorous formal review,
- 8 public comment, and approval process could lead to inconsistencies and unintended negative
- 9 consequences in the rule. For consistency and integrity of the Department's air program, it is
- important for the Department to rely on the EPA-approved Reference Methods used throughout
- 11 their federal air quality regulations.
- 12 Subsection C
- 13 CAA proposes to strike the last four sentences of Subsection C, which read as follows:
- For an affected EGU equipped with an integrated carbon capture system that
- supplies steam to the carbon capture system, owners or operators shall install,
- 16 calibrate, maintain, and operate meters to continuously record the total useful
- thermal output. The record of the thermal output shall be made on an hourly basis.
- For process steam applications, owners or operators shall install, calibrate,
- maintain, and operate meters to continuously record the steam flow rate,
- temperature, and pressure. The records of each parameter shall be made on an
- 21 hourly basis.
- The Department does not take a position on the proposal to remove this language and
- 23 recommends that the Board decide whether to adopt this revision based on the testimony of the
- other parties. The Department notes that the language is based upon regulatory language in
- 25 Subpart TTTT.
- 26 Subsection E

1	CAA proposes to strike the term "gross energy output" and insert the term "net
2	generation"; strike the terms "(electric, thermal and/or mechanical, as applicable)"; and strike the
3	term "loads" and insert the term "net generation." The proposed revisions are part of CAA's
4	broader request to base the emission standard on net generation rather than gross energy output,
5	as proposed by the Department. The Department does not take a position on these requested
6	revisions and recommends that the Board decide whether to revise the language based on the
7	testimony of the other parties. The Department notes that the proposed revisions do not align
8	with Subpart TTTT, as previously discussed.
9	Subsection G
10	CAA proposes to delete the entirety of Subsection 20.2.101.113.G and replace the
11	language with a new requirement. Specifically, CAA proposes to strike the following language:
12 13 14 15	Operating hours in which CO <sub>2</sub> mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in 40 CFR Part 60.5540(a)(1)) and shall not be used in the compliance determinations under 40 CFR Part 60.5540.
16	CAA proposes a new Subsection G requiring owners or operators to develop a Compliance
17	Assurance Monitoring ("CAM") plan, as follows:
18 19 20 21 22 23 24 25 26 27 28 29 30	The monitoring plan shall contain compliance assurance monitoring (CAM) provisions sufficient to ensure that the EGF does not violate the emission standard. At a minimum, the CAM plan shall require that the owner or operator of an affected EGF (1) provide notice to the Department if the owner or operator obtains credible information that indicates that the EGF may violate the emission standard in section 20.2.101.112 or if any 30-operating-day rolling average emission rate of CO2 exceeds 1,100.0 lbs/MWh-net and (2) submit to the Department a corrective action plan if the 30-operating-day rolling average emission rate of CO2 exceeds 1,100.0 lbs/MWh-net for two consecutive 30-operating-day periods. The owner of operator must submit the corrective action plan to the Department within 30 days of the affected EGF having two consecutive 30- operating-day periods in which the CO2 emission rate exceeds 1,100.0 lbs/MWh-net. The owner or operator shall cease operation of the EGF on
31 32	the next calendar day after the affected EGF has two consecutive 30-operating- day periods in which the CO2 emission rate exceeds 1,100.0 lbs/MWh-net, and

1 2 3 4 5	shall not resume operations of the EGF until the public has had an opportunity to comment on the proposed corrective action plan, the Department has approved the corrective action plan, and the operator has implemented the corrective action plan.
6	CAM is a federal air quality regulation codified at 40 C.F.R. Part 64 consisting of
7	specific regulatory requirements intended to provide a reasonable assurance of compliance with
8	applicable requirements under the Clean Air Act for large emission sources that rely on pollution
9	control devices to achieve compliance with an emission standard. Monitoring is conducted to
10	determine that pollution control devices, once installed or otherwise employed, are properly
11	operated and maintained so that they continue to achieve a level of control that complies with
12	applicable emission requirements. CAM establishes monitoring for the purpose of: (1)
13	documenting continued operation of the control devices within ranges of specified indicators of
14	performance (such as emissions, control device parameters, and process parameters) that are
15	designed to provide a reasonable assurance of compliance with applicable requirements; (2)
16	indicating any excursions from these ranges; and (3) responding to the data so that the cause or
17	causes of the excursions are corrected.
18	The CAM rule itself provides that a CEMS satisfies the requirements under 40 C.F.R.
19	Part 64. Specifically, Section 64.3(d)(1) states as follows:
20 21 22 23 24	If a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS) or predictive emission monitoring system (PEMS) is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy the requirements of this part 40 CFR 64.
25	CAA also proposes additional requirements in Subsection G directing owners or
26	operators to notify the Department if they obtain credible information that indicates they may
27	violate the standard, or if they did violate the standard; a requirement to submit a corrective
28	action plan within 30 days if an EGF has two consecutive exceedances of the standard; and

1 requirements for owners or operators that record an exceedance of the 1,100 lb/Mw-h standard.

2 For the first exceedance, the owners or operators must provide notification to the Department

3 and the public. A second exceedance would require the facility to cease operations on the next

calendar day after the exceedance and not resume operations until a corrective action plan is put

out for public comment, approved by the Department, and implemented by the owner or

operator.

The requirement for the owner or operator to cease operations after two exceedances is highly prescriptive and is not appropriate language for a rule. Much of what CAA contemplates is already required under state regulation, with the exception of a mandatory shutdown.

Specifically, Part 20.2.7 NMAC – *Excess Emissions* ("Part 7") would require an owner or operator that exceeded the emission standard in Part 101 to submit a detailed report of the excess emission within twenty-four (24) hours of its occurrence and a final, more comprehensive report within ten (10) days of the event. Part 7 requires owners and operators conduct a thorough evaluation of the cause of the excess emission, and identify the cause and nature of the excess emission; the steps taken to limit the duration and magnitude of the excess emission; the corrective action(s) taken to eliminate the cause of the excess emission; a schedule for implementation of those actions; the corrective action(s) taken to prevent a recurrence of the excess emission; and whether the owner or operator attributes the excess emission to malfunction, startup or shutdown.

The requirement that the owner or operator shut down the facility until the public has had an opportunity to comment on the proposed corrective action plan, the Department has approved the corrective action plan, and the owner or operator has implemented the corrective action plan is problematic. CAA does not propose how the corrective action plan would be made available to

- 1 the public, the timeline for comments, or how comments from the public would be incorporated
- 2 into the plan. CAA does not propose any timeline for the Department's review of the plan, or any
- 3 timelines under which the owner or operator must comply with its provisions. Thus, as written,
- 4 given the uncertainty of the above proposed requirements, the Department does not agree to the
- 5 proposed language.
- The Department is authorized to enforce the provisions of the AQCA and the Board's
- 7 regulations issuing Administrative Compliance Orders or commencing civil actions in district
- 8 court against owners and operators that violate air quality regulations or permits. Taking action
- 9 through the NMED Air Quality Bureau's air enforcement program is the appropriate regulatory
- mechanism to address actual violations of the emission standard in Part 101.

## 20.2.101.114 – Recordkeeping Requirements

### 12 Subsection B

11

- 13 CAA proposes to strike the term "monthly" and insert the term "daily"; strike the term
- "month" and insert the term "day"; and strike the term "12 month" from the language in
- 15 Subsection B. These proposed revisions are part of CAA's broader proposal to modify the
- averaging period of the emission standard from a 12-operating month rolling average to a 365-
- operating day rolling average. The Department does not take a position on the requested
- 18 revisions and recommends that the Board decide whether to revise the language based on the
- 19 testimony of the other parties. As noted above, during EPA's multi-year rulemaking process for
- 20 Subpart TTTT, EPA requested comments on the appropriateness of a 12-operating month rolling
- 21 average for the emission standard. EPA ultimately retained the 12-operating month rolling
- average in the final regulation. See NMED Exhibit 21, p. 1,482.

## Subsection F

1

2	CAA proposes to increase the number of years that owners or operators are required to
3	retain records from three to ten years in Paragraph 2 of Subsection F, and from two to five years
4	for onsite records retention in Paragraph 3 of Subsection F. The Department agrees with these
5	proposed revisions to the recordkeeping requirements and recommends that the Board adopt the
6	proposed revisions.
7	CAA proposes to insert an additional recordkeeping requirement (4) in Subsection F, as
8	follows: "Owners or operators shall maintain records necessary to document the mass of CO2
9	sent offsite for sequestration and the location of the sequestration site." This proposed language
10	requires owners or operators to record the calculation of the actual CO <sub>2</sub> emissions leaving the
11	facility and the location of the sequestration site. The Department does not take a position on this
12	requested revision and recommends that the Board decide whether to add this recordkeeping
13	requirement based on the testimony of the other parties.
14	20.2.101.115 - Reporting Requirements
15	Subsection A – Paragraph (1)
16	CAA proposes to strike the second sentence of Paragraph (1), which reads:
17 18 19 20	After owners or operators have accumulated the first 12 operating months for the affected EGF, owners or operators shall submit a report for the calendar quarter that includes the twelfth operating months no later than 30 days after the end of that quarter.
21 22	CAA proposes to replace that sentence with the following:
23	The first quarterly report must be submitted to the Department on April 30, 2023.
24	The Department agrees in part with the requested revision. The Department has revised
25	Subsection 20.2.101.115.A(1) to require owners or operators to submit a quarterly report during
26	the first twelve months of operation, in addition to the requirement to submit a report for the

- 1 calendar quarter that includes the first twelve months of operation. This revision is reflected in
- 2 NMED Exhibit 29.
- 3 Subparagraph (a) of Paragraph (2) of Subsection A
- 4 CAA proposes the following revisions to Subparagraph 20.2.101.115(A)(2)(a):
- 5 Except as provided in this Part, Oowners or operators shall calculate each average
- 6 CO2 mass emission rate for the compliance period according to the procedures in
- 7 40 CFR Part 60.5540.
- 8 The Department agrees to this proposed revision and recommends that the Board adopt it.
- 9 <u>Subparagraph (e) of Paragraph (2) of Subsection A.</u>
- 10 CAA proposes to strike Subparagraph 20.2.101.115(A)(2)(e) in its entirety. The proposed
- deletion is part of CAA's broader request to base the emission standard on net generation rather
- than gross energy output, as proposed by the Department. The Department does not take a
- position on this requested revision and recommends that the Board decide whether to strike this
- language based on the testimony of the other parties. The Department notes that the deletion of
- this language is inconsistent with Subpart TTTT, as previously discussed.

TITLE 20 ENVIRONMENTAL PROTECTION CHAPTER 2 AIR OUALITY (STATEWIDE)

PART 101 CARBON DIOXIDE EMISSION STANDARDS FOR COAL-FIRED ELECTRIC

**GENERATING FACILITIES** 

**20.2.101.1 ISSUING AGENCY:** Environmental Improvement Board. [20.2.101.1 NMAC – N, XX/XX/2022]

**20.2.101.2 SCOPE:** All geographic areas within the jurisdiction of the Environmental Improvement Board. [20.2.101.2 NMAC – N, XX/XX/2022]

**20.2.101.3 STATUTORY AUTHORITY:** Environmental Improvement Act, Section 74-1-1 to 74-1-16 NMSA 1978, including specifically Paragraph (4) of Subsection A of Section 74-1-8 NMSA 1978, and Air Quality Control Act, Sections 74-2-1 to 74-2-22 NMSA 1978, including specifically Subparagraph (b) of Paragraph 1 of Subsection B of Section 74-2-5 NMSA 1978. [20.2.101.3 NMAC - N, XX/XX/2022]

**20.2.101.4 DURATION:** Permanent.

[20.2.101.4 NMAC - N, XX/XX/2022]

**20.2.101.5 EFFECTIVE DATE:** January 1, 2023, except where a later date is specified in another section. [20.2.101.5 NMAC - N, XX/XX/2022]

**20.2.101.6 OBJECTIVE:** The objective of this Part is to establish a carbon dioxide (CO<sub>2</sub>) emission standard for coal-fired electric generating facilities with an original installed capacity exceeding three hundred megawatts. [20.2.101.6 NMAC - N, XX/XX/2022]

**20.2.101.7 DEFINITIONS:** In addition to the terms defined in 20.2.2 NMAC (Definitions), as used in this Part:

- **A.** "Affected Electric Generating Facility or Affected EGF" means a new or existing electric generating facility with an original installed capacity exceeding 300 megawatts and that uses coal as a fuel source.
- **B.** "Continuous emission monitoring system or CEMS" means the equipment used to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system), a permanent record of CO<sub>2</sub> emissions or stack gas volumetric flow rate.
  - **C.** "**Department**" means the New Mexico environment department.
- **D.** "Electric generating facility (EGF)" means a facility that generates electricity and includes <u>all</u> appurtenances and pollution control devices, and including, but not limited to all processes and equipment used to separate, compress, and transport CO<sub>2</sub> or other pollutants to offsite locations. A facility may include one or more electric generating units (EGU) at the same location.
- **E.** "Megawatt-hour (MWh)" means the total gross energy output (Pgross) from the affected EGU as determined by 40 CFR Part 60.5540.
- **F.** "Operating month" means a calendar month during which any fuel is combusted in the affected EGU at any time.
  - **G.** "Operator" means the person or persons responsible for the overall operation of an affected EGF.
  - **H.** "Owner" means the person or persons who own all or part of an affected EGF.
- **20.2.101.8 SEVERABILITY:** If any provision of this Part, or the application of this provision to any person or circumstance is held invalid, the remainder of this Part, or the application of this provision to any person or circumstance other than those as to which it is held invalid, shall not be affected thereby. [20.2.101.8 NMAC N, XX/XX/2022]
- **20.2.101.9 CONSTRUCTION:** This Part shall be liberally construed to carry out its purpose. [20.2.101.9 NMAC N, XX/XX/2022]
- **20.2.101.10 SAVINGS CLAUSE:** Repeal or supersession of prior versions of this Part shall not affect administrative or judicial action initiated under those prior versions.

[20.2.101.10 NMAC - N, XX/XX/2022]

**20.2.101.11 COMPLIANCE WITH OTHER REGULATIONS:** Compliance with this Part does not relieve a person from the responsibility to comply with other applicable federal, state, or local laws, rules, or regulations, including more stringent controls.

[20.2.101.11 NMAC - N, XX/XX/2022]

**20.2.101.12 DOCUMENTS:** Documents incorporated and cited in this Part may be viewed at the New Mexico environment department air quality bureau.

[20.2.101.12 NMAC - N, XX/XX/2022]

[The Air Quality Bureau is located at 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico 87505.]

#### 20.2.101.13-20.2.101.110 [RESERVED]

**20.2.101.111 APPICABILITY:** This Part shall apply to new and existing affected electric generating facilities. [20.2.101.111 NMAC - N, XX/XX/2022]

**20.2.101.112 EMISSION STANDARD:** After January 1, 2023, the owner or operator of an affected EGF shall limit CO<sub>2</sub> emissions from the EGF to no more than 1,100 pounds per megawatt-hour on a 12-operating-month rolling average basis. The calculation shall be performed within fifteen days of the end of each calendar month. The calculation of pounds of CO<sub>2</sub> emitted must include all CO<sub>2</sub> emitted during the compliance period, including but not limited to emissions during startup, shutdown, maintenance, and malfunction. The calculation of megawatt-hours generated during the compliance period must include all megawatt-hours generated by the affected EGF, regardless of whether or how the electricity is used.

[20.2.101.112 NMAC - N, XX/XX/2022]

#### **20.2.101.113** MONITORING REQUIREMENTS:

- A. Owners or operators of an affected EGF shall prepare a monitoring plan to quantify the hourly CO<sub>2</sub> mass emission rate in tons per hour (tph) in accordance with the applicable provisions of this Section and 40 CFR Part 75.53(g). The monitoring plan shall be submitted to the Department and in place prior to reporting emission data and the results of the monitoring system certification test under this Subsection. The monitoring plan shall be updated as appropriate.
- B. Owners or operators shall determine the hourly CO<sub>2</sub> mass emissions in pounds or tons from each affected electric generating unit (EGU) according to paragraphs (B)(1) through (5) of this Subsection.
- (1) Owners or operators shall install, certify, operate, maintain, and calibrate a CO<sub>2</sub> continuous emission monitoring system (CEMS) to directly measure and record the hourly average CO<sub>2</sub> concentration in the affected EGU exhaust gas emitted to the atmosphere, and a flow monitoring system to measure hourly average stack gas flow rates, in accordance with 40 CFR Part 75.10(a)(3)(i). As an alternative to direct measurement of the CO<sub>2</sub> concentration, provided that the affected EGU does not employ carbon separation (e.g., carbon capture and storage), owners or operators may use data from a certified oxygen (O<sub>2</sub>) monitor to calculate the hourly average CO<sub>2</sub> concentration in accordance with 40 CFR Part 75.10(a)(3)(iii). If the CO<sub>2</sub> concentration is measured on a dry basis, owners or operators shall also install, certify, operate, maintain, and calibrate a continuous moisture monitoring system, in accordance with 40 CFR Part 75.11(b). Alternatively, owners or operators may either use an appropriate fuel-specific default moisture value from 40 CFR Part 75.11(b) or submit a petition to the Department for a site-specific default moisture value.
- (2) For each CEMS used to comply with this Part, owners or operators shall meet the applicable certification and quality assurance procedures in 40 CFR Part 75.20 and Appendices A and B of 40 CFR Part 75.
- (3) Owners or operators shall use only unadjusted exhaust gas volumetric flow rates to determine the hourly  $CO_2$  mass emission rate from each affected EGU. Owners or operators shall not apply the bias adjustment factors described in Section 7.6.5 of Appendix A to 40 CFR Part 75 to the exhaust gas flow rate data.
- (4) Owners or operators shall select an appropriate reference method to set up the flow monitor and perform the ongoing Relative Accuracy Test Audit (RATA), in accordance with 40 CFR Part 75. If owners or operators use a Type-S pitot tube or a pitot tube assembly for the flow RATA, owners or operators shall calibrate the pitot tube or pitot tube assembly. Owners or operators may not use the 0.84 default Type-S pitot tube coefficient specified in Method 2.

(5) Owners or operators shall calculate the hourly CO<sub>2</sub> mass emissions (in tons) as described in Subparagraphs (a) through (c) of Paragraph 5 of this Section. Owners and operators shall only perform this calculation for valid operating hours, as defined in 40 CFR Part 60.5540(a)(1).

- (a) Begin with the hourly CO<sub>2</sub> mass emission rate (tons/hour), obtained either from Equation F-11 of Appendix F of 40 CFR Part 75 (if the CO<sub>2</sub> concentration is measured on a wet basis), or by following the procedure in section 4.2 of Appendix F of 40 CFR Part 75 (if the CO<sub>2</sub> concentration is measured on a dry basis).
- (b) Next, multiply each hourly  $CO_2$  mass emission rate by the EGU or stack operating time in hours (as defined in 40 CFR Part 72.2), to calculate the tons of  $CO_2$ .
- (c) The hourly  $CO_2$  emission rate and the EGU (or stack) operating hours used to calculate the  $CO_2$  emission rate shall be recorded under Section 114 and shall be reported as required under Section 115 of this Part.
- C. Owners or operators shall install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output from each affected EGU. These measurements shall be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI Standards No. C12.20 (see 40 CFR Part 60.17). For an affected EGU equipped with an integrated carbon capture system that supplies steam to the carbon capture system, owners or operators shall install, calibrate, maintain, and operate meters to continuously record the total useful thermal output. The record of the thermal output shall be made on an hourly basis. For process steam applications, owners or operators shall install, calibrate, maintain, and operate meters to continuously record the steam flow rate, temperature, and pressure. The records of each parameter shall be made on an hourly basis.
- D. Consistent with 40 CFR Part 60.5520, if two or more affected EGUs serve a common electric generator, the owners or operators shall apportion the combined hourly gross energy output to the individual affected EGU according to the fraction of the total steam load contributed by each EGU. Alternatively, if the EGUs are identical, owners or operators may apportion the combined hourly gross electrical load to the individual EGUs according to the fraction of the total heat input contributed by each EGU.
- E. In accordance with 40 CFR Part 60.13(g) and 40 CFR Part 60.5520, if an owner or operator of two or more affected EGUs that utilize the CEMS provisions in Paragraph B of this Section share a common exhaust stack, the owners or operators may monitor the hourly CO<sub>2</sub> mass emissions at the common stack, in lieu of monitoring each EGU separately. If an owner or operator chooses this option, the hourly gross energy output (electric, thermal, and/or mechanical, as applicable) shall be the sum of the hourly loads for each individual affected EGU, and the owner or operator shall express the operating time as "stack operating hours" (as defined in 40 CFR Part 72.2). If an owner or operator demonstrates compliance with the emission standard of this Part at the common exhaust stack, each affected EGU utilizing the stack shall be determined to be in compliance.
- F. In accordance with 40 CFR Part 60.13(g) and 40 CFR Part 60.5520, if an owner or operator of an affected EGU utilizing the CEMS provisions in Paragraph B of this Section has exhaust gas that is emitted to the atmosphere through multiple stacks (or if the exhaust gases are routed to a common stack through multiple ducts and owners or operators elect to monitor the ducts), the owner or operator shall monitor the hourly CO<sub>2</sub> mass emissions and the "stack operating time" (as defined in 40 CFR Part 72.2) at each stack or duct separately. Owners or operators shall determine compliance with the emission standard of this Part by summing the CO<sub>2</sub> mass emissions measured at the individual stacks or ducts, and dividing by the total gross output for the affected EGU.
- G. Operating hours in which  $CO_2$  mass emission rates are calculated using maximum potential values are not "valid operating hours" (as defined in 40 CFR Part 60.5540(a)(1)) and shall not be used in the compliance determinations under 40 CFR Part 60.5540. [20.2.101.113 NMAC N, XX/XX/2022]

## **20.2.101.114 RECORDKEEPING REQUIREMENTS:**

- A. Owners or operators shall maintain records of the information used to demonstrate compliance with this Part as specified in 40 CFR Parts 60.7(b) and 40 CFR Part 60.7(f) and shall comply with the applicable recordkeeping requirements of subpart F of 40 CFR Part 75. Owners or operators not subject to the requirements of 40 CFR Part 75 shall, at minimum, keep the records required under 40 CFR Part 60.5560(b)(2).
- B. Owners or operators shall keep records of the calculations performed to determine the hourly and monthly total  $CO_2$  mass emissions in tons for:
  - (1) Each operating month for each affected EGU; and
  - (2) Each monthly rolling 12-month period.
  - C. Consistent with 40 CFR Part 60.5520, owners or operators shall keep records of the applicable

data recorded and the calculations performed and used to determine the gross energy output for each operating month for each affected EGU.

- D. Owners or operators shall keep records of the calculations performed to determine any site-specific carbon-based F-factors used in the emissions calculations (if applicable).
- E. Owners or operators shall maintain records of the information used to demonstrate compliance with this Subsection as specified in 40 CFR Part 60.5560.
  - F. Owners or operators shall comply with the following requirements for record retention:
    - (1) Records shall be in a form suitable and readily available for review;
- Owners or operators shall maintain each record for  $\underline{103}$  years after the date of conclusion of each compliance period; and
- (3) Owners or operators shall maintain a record onsite for at least 52 years after the date of each measurement, maintenance, corrective action, report, or record, according to 40 CFR Part 60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. Owners or operators may maintain the records offsite for the remaining year(s) as required by this subpart.

[20.2.101.114 NMAC - N, XX/XX/2022]

#### **20.2.101.115 REPORTING REQUIREMENTS:**

- A. Owners or operators shall comply with the following reporting requirements:
- (1) Owners or operators shall submit electronic quarterly reports. For the first twelve months, owners or operators shall submit an electronic quarterly report no later than 30 days after the end of each quarter. After owners or operators have accumulated the first 12-operating months for the affected EGF, owners or operators shall submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, owners or operators shall submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
  - (2) Owners or operators shall include the following information in each quarterly report:
- (a) Each rolling average CO<sub>2</sub> mass emission rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. Except as provided in this Part, Oowners or operators shall calculate each average CO<sub>2</sub> mass emission rate for the compliance period according to the procedures in 40 CFR Part 60.5540. Owners or operators shall report the dates (month and year) of the first and twelfth operating months in each compliance period for which owners or operators performed a CO<sub>2</sub> mass emission rate calculation. Owners or operators shall identify compliance periods that ended in each quarterly report;
- (b) If one or more compliance periods end in the quarter, owners or operators shall identify each operating month in the calendar quarter where owners or operators of an affected EGF violated the emission standard of this Part;
- (c) If one or more compliance periods end in the quarter and there are no violations for an affected EGF, the owners or operators shall include an affirmative compliance statement in the quarterly report;
- (d) The percentage of valid operating hours in each 12-operating-month compliance period (i.e., the total number of valid operating hours (as defined in 40 CFR Part 60.5540(a)(1)) in that period divided by the total number of operating hours in that period, and multiplied by 100 percent); and
- (e) An indication whether or not the hourly gross energy output (Pgross) values used in the compliance determinations are based solely upon gross electrical load, in accordance with 40 CFR Part 60.5520.
- (3) In the final quarterly report for each calendar year, owners or operators shall include the potential electric output of the affected EGU and the gross energy output over the four quarters of the calendar year, in accordance with 40 CFR Part 60.5520.
- B. Owners or operators shall meet all applicable reporting requirements under subpart G of 40 CFR Part 75 with reporting beginning January 1, 2023, or the date on which the EGF becomes an affected facility under this Part.
- C. If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph 40 CFR Part 60.55(c)(3), the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with 40 CFR Part 75.4(j), 40 CFR Part 75.37(b), or section 2.4 of Appendix D of- 40 CFR Part 75 (as applicable).

[20.2.101.115 NMAC - N, XX/XX/2022]

