

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** January 13, 2025

Thru: Laurie Gharis, Chief Clerk
Kelly Keel, Executive Director

From: Richard C. Chism, Director RC
Office of Air

Subject: Docket No. 2023-1658-MIS / Non-Rule Project No. 2024-005-OTH-NR
Revised Back-up for Commission Approval for Adoption of Air Quality
Standard Permit for Natural Gas Electric Generating Units

The back-up package for the adoption of the new Air Quality Standard Permit for Natural Gas Electric Generating Units filed on January 10, 2025, erroneously included the proposal Standard Permit document (page 5 – page 11) rather than the final Standard Permit document. The filed back-up materials are requested to be revised to include the correct document version.

Attachments:
Adopted Standard Permit

cc: Chief Clerk, 7 copies

Air Quality Standard Permit for Natural Gas Electric Generating Units Effective January 30, 2025

This standard permit authorizes natural gas electric generating units that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid, and that meet all of the conditions listed below.

(a) Applicability

- (1) This standard permit may be used to authorize natural gas electric generating units that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid.
- (2) This standard permit shall not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code (THSC); Texas Water Code; rules of Texas Commission on Environmental Quality (TCEQ or commission); or any additional state or federal regulations.
- (3) Any project that constitutes a new major stationary source or major modification as defined in 30 Texas Administrative Code (TAC) §116.12 (Nonattainment and Prevention of Significant Deterioration Review Definitions) shall not be authorized by this standard permit.
- (4) The electric generating units authorized under this standard permit shall only be engines firing pipeline-quality natural gas. This standard permit may not be used to authorize boilers or turbines.

(b) Definitions

- (1) All words and terms in this standard permit shall have the meanings listed in 30 TAC Chapter 116, Subchapter A (Definitions), unless the context indicates otherwise.

(c) Administrative Requirements

- (1) The owner or operator shall not begin construction or operation of facilities authorized under this standard permit without prior written notification from the TCEQ executive director.
- (2) Any claim under this standard permit shall comply with:
 - (A) 30 TAC §116.604(1) and (2) (Duration and Renewal of Registrations to Use Standard Permits).
 - (B) 30 TAC §116.605(d)(1) and (2) (Standard Permit Amendment and Revocation).
 - (C) 30 TAC §116.610(a)(2) through (6) (Applicability).
 - (D) 30 TAC §116.611 (Registration to Use a Standard Permit).
 - (E) 30 TAC §116.614 (Standard Permit Fees); and
 - (F) 30 TAC §116.615 (General Conditions).
- (3) All records required by this standard permit:
 - (A) shall be maintained in written or electronic form, and
 - (B) shall be made available at the request of personnel from TCEQ, the Environmental Protection Agency (EPA), or any local air pollution control agency with jurisdiction.

- (4) The following records shall be kept at the plant site for the life of the permit:
 - (A) A copy of this standard permit.
 - (B) All permit applications and subsequent representations submitted to TCEQ.
 - (C) A copy of the manufacturer's design and operation specifications and all emission-related maintenance requirements.
 - (D) Records of the initial performance testing completed to demonstrate initial compliance.
- (5) The following information shall be maintained by the permit holder in a form suitable for inspection for a period of five years after collection and shall be made available upon request:
 - (A) Records of the hours of operation and quantity of natural gas used for the engine, in million British thermal units (MMBtu) and million standard cubic feet (MMscf), all kept on a monthly and rolling 12-month basis.
 - (B) Records of the sulfur content of the natural gas based on receipts, or chemical analyses, including test results from the fuel supplier.
 - (C) Records of emission-related maintenance, including replacement of control system components, media and sensors, if present.
 - (D) Records of visible emissions observations, including corrective actions taken, as required by this permit.
 - (E) Records of sampling performed to evaluate emissions.

(d) General Requirements

- (1) Stack parameters shall meet all of the following:
 - (A) The minimum stack height for each engine shall be 25 feet.
 - (B) The stack diameter shall be equal to or less than 8 inches.
 - (C) The minimum stack exit temperature shall be at least 961 degrees Fahrenheit, except during periods of startup or shutdown not to exceed 30 minutes per event, as documented in engine manufacturer specifications.
 - (D) The exit velocity shall be at least 442 feet per second, except during periods of startup or shutdown not to exceed 30 minutes per event, as documented in engine manufacturer specifications.
- (2) Engines must be located at least 25 feet from the nearest point on the property line. The maximum number of engines that may be authorized under this standard permit depends on the distance from the property line to the nearest engine but may not exceed six engines. The property line limitations are specified in Table 1 below.

Table 1: Engine Distance Limitations

Minimum Distance to Property Line	25 ft	25 ft	100 ft	600 ft	600 ft	900 ft
Number of Engines	1	2	3	4	5	6

- (3) A non-resettable run time meter shall be installed on the engine.

(e) Emission Limitations

- (1) Emissions from each engine shall not exceed the emission limitations in Table 2 and the emission standards listed in Table 3.

Table 2: Emissions Limits, per Engine

Air Contaminant	Pounds per Hour	Tons per Year, 12-month rolling period
Nitrogen Oxides (NO _x)	1.62	0.32
Formaldehyde	0.97	0.19
Carbon Monoxide (CO)	6.47	1.29
Volatile Organic Compounds (VOC)*	2.27	0.45
Total Particulate Matter (PM)	0.003	0.001
Total particulate matter equal to or less than 10 microns in diameter (PM ₁₀)	0.003	0.001
Total particulate matter equal to or less than 2.5 microns in diameter (PM _{2.5})	0.003	0.001
Sulfur Dioxide (SO ₂)	0.014	0.003
Sulfuric Acid (H ₂ SO ₄)	0.002	0.0004

*VOC emission rate totals include formaldehyde emissions

Table 3: Emission Standards, per Engine

Air Contaminant	Emission Standards in g/hp-hr, one-hour averaging period
NO _x	0.5
CO	2.0
VOC*	0.7
PM	0.0008
PM ₁₀	0.0008
PM _{2.5}	0.0008
Formaldehyde	0.3

*VOC emission standard includes formaldehyde

- (2) Compliance with the NO_x and CO emission limits shall be demonstrated in accordance with sections (f)(4) and (f)(5).

(f) Operational Requirements

- (1) Emissions from each engine shall be limited to no more than 400 hours of operation per rolling 12-month period.
- (2) The engine and after-treatment control device shall be operated and maintained according to the manufacturer's emission-related written instructions.
- (3) Fuel Specifications:
 - (A) Fuel is limited to pipeline-quality, sweet natural gas containing no more than 0.5 grains total sulfur per 100 dry standard cubic feet (dscf) on an hourly and annual basis.
 - (B) Permit holder shall install and operate a totalizing fuel flow meter to measure the fuel usage for the unit and fuel usage shall be recorded monthly. The monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5%.
 - (C) The natural gas shall be sampled annually to determine total sulfur and net heating values. Test results from the fuel supplier may be used to satisfy this requirement. Additionally, upon written request by the TCEQ executive director or any air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel utilized at this facility at the time the request is made or shall allow air pollution control agency representatives to obtain a sample for analysis.
- (4) Initial Determination of Compliance
 - (A) If the certified stationary spark-ignited internal combustion engine and control device are operated and maintained according to the manufacturer's emission-related written instructions, the permit holder must keep records of conducted maintenance to demonstrate compliance, but no initial determination of compliance nor continuous demonstration of compliance testing under subsections (f)(4)(B)-(H) or (f)(5) is required. To ensure continuing compliance with the emissions limitations, the owner or operator shall re-certify a unit at least every three years. Re-certification may be accomplished by following a maintenance schedule that the manufacturer certifies will ensure continued compliance with the required NO_x standard or by third party testing of the unit using appropriate EPA reference methods, California Air Resources Board methods, or equivalent alternative testing methods approved by the TCEQ executive director to demonstrate that the unit still meets the required emission standards.
 - (B) Stack sampling and other testing shall be performed as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the engine(s) to demonstrate compliance with any emission rate represented in the registration and emission standards listed in subsection (e)(1). The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual (including but not limited to the TCEQ Guidelines for Stack Sampling Facilities and Submitting a Complete Air Emission Test Report) and the U.S. EPA Stack Testing Guidance.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) testing requiring EPA approval shall be submitted to the TCEQ regional office. The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The TCEQ regional office must approve any deviation from specified sampling procedures.

- (i) The appropriate TCEQ regional office shall be notified through the TCEQ Stack Testing Online Reporting System (STORS) no less than 45 days prior to sampling. The notice shall include:
 - 1. Proposed date for pretest meeting.
 - 2. Date sampling will occur.
 - 3. Name of firm conducting sampling.
 - 4. Type of sampling equipment to be used.
 - 5. Method or procedure to be used in sampling.
 - 6. Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - 7. Procedure used to determine worst case emissions such as monitoring engine horsepower load during the sampling period.
- (C) The nitrogen dioxide (NO₂)-to-NO_x ratio shall be determined for the engine tested at full load and full speed.
- (D) Air contaminants emitted from the engines to be tested for include (but are not limited to) NO_x, CO, and oxygen (O₂).
- (E) Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facility and at such other times as may be required by the TCEQ executive director. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ regional office.
- (F) Engine emissions and exhaust flow rates shall be determined using EPA methodology approved by the TCEQ regional office prior to sampling. Emissions shall be sampled at four points over the normal load range of the engine, including the minimum and maximum of the range.
 - (i) At each test load, the following operating parameters shall be varied to identify the range over which the allowable emission limits are not exceeded: engine speed and heat rate. The NO_x emission levels measured by Reference Method 20 shall be adjusted accordingly. The unadjusted NO_x emission level shall be used to determine compliance with the brake-specific emission limits of this permit.

- (G) Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the TCEQ Regulatory Guidance RG-578 - Submitting a Complete Air Emissions Test Report. The reports shall be distributed as follows:
 - (i) One copy to the appropriate TCEQ regional office through STORS.
 - (ii) One copy to each local air pollution control program, if applicable.
 - (H) Sampling ports and platform(s) shall be incorporated into the design of the source stack according to the specifications set forth in "Guidelines for Stack Sampling Facilities (Formerly Chapter 2)". Alternate sampling facility designs must be submitted for approval to the TCEQ regional office.
- (5) Continuous Demonstration of Compliance
- (A) The permit holder shall begin performing the following for the engine(s) represented in the registration within 180 days of the completion of initial stack testing per section (f)(4).
 - (i) Conduct evaluations of engine performance quarterly, with at least 60 days between tests, based on the calendar year, by measuring the NO_x, CO, and O₂ content of the exhaust. After four consecutive acceptable quarterly tests, the engine testing schedule may be changed to semiannually, with at least four months between tests, on approval by the TCEQ regional office.
 - (ii) The use of portable analyzers specifically designed for measuring the concentration of each contaminant in parts per million by volume is acceptable for these evaluations. A hot air probe or equivalent shall be used with portable analyzers to prevent error in results due to high exhaust gas temperatures. Three sets of measurements shall be averaged to determine the concentrations. Prior to and following the measurements, the portable analyzer shall be checked for accuracy using an audit gas that conforms to the specifications in 40 CFR Part 60, Appendix F, 5.1.2(3). Any other method approved by the appropriate TCEQ regional office is also acceptable.
 - (iii) If the portable analyzer is capable of measuring nitric oxide and nitrogen dioxide, then these measurements shall be summed to determine the NO_x emission rate. Emissions shall be measured and recorded in the as-found operating condition, except no compliance determination shall be established during start-up, shutdown, or under breakdown conditions.
 - (iv) Emissions calculations shall be used to convert the portable analyzer data to a clear demonstration of compliance with the allowable pounds per hour of NO_x and CO represented in the registration on a quarterly or semiannual basis, per subparagraph (5)(A)(i), for the engine.
 - (v) If the engine is out of operation for more than one year, other than for maintenance and readiness checks, the performance of the engine shall be evaluated within the first 200 operating hours after returning the engine to service.

- (vi) Within 14 days after each occurrence of engine maintenance that is reasonably expected to affect emissions, such as oxygen sensor replacement, air fuel ratio controller replacement, catalyst cleaning, or catalyst replacement, the engine shall be tested for NO_x and CO emission limits in this permit.
 - (vii) Install and operate a monitoring device capable of recording the inlet flue gas temperature to the catalyst. The monitoring device shall be calibrated according to the manufacturer's specifications or at least annually. The monitoring device shall be accurate to 2% of reading or 2.5 degrees Celsius.
 - (B) An O₂ or NO_x sensor shall be installed on the engine. The sensor shall be maintained and replaced per manufacturer recommendations. The sensor shall be connected to a visible or audible indicator of the proper O₂, or NO_x content and checks of the indicator shall be made at least daily.
 - (C) The permit holder shall either measure, or develop a program to calculate, the total mass flow rate through the stack to ensure continuous compliance with the emission limitations represented in the registration. After the initial demonstration of compliance, ongoing compliance with the NO_x and CO per year emission rates represented in the registration shall be demonstrated by calculating rolling 12-month annual emissions from emission factors (lb/MMBtu, HHV) obtained from the results of the sampling required by paragraph (f)(5)(A)(i) and the monthly total heat input (MMBtu, HHV) from natural gas fuel.
- (6) Visible Emissions Requirements
- (A) No visible emissions shall leave the property. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA Test Method (TM 22) or equivalent.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for Rulemaking Adoption

AGENDA REQUESTED: January 30, 2025

DATE OF REQUEST: January 10, 2025

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Gwen Ricco, Texas Register/Agenda Coordinator, (512) 239-2678

CAPTION: Docket No. 2023-1658-MIS. Consideration of the adoption of a new non-rule air quality standard permit for natural gas fired electric generating units (EGUs) under Texas Health and Safety Code, Section 382.05195, Standard Permit, and 30 Texas Administrative Code Chapter 116, Subchapter F, Standard Permits. The new non-rule standard permit authorizes natural gas EGUs that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid. Public notice of the proposed standard permit was published in the June 28, 2024, issue of the *Texas Register* (49 TexReg 4834). (Stephanie Heath, Booker Harrison) (Non-Rule Project No. 2024-005-OTH-NR)

Richard C. Chism

Director

Samuel Short

Division Deputy Director

Gwen Ricco

Agenda Coordinator

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** January 10, 2025

Thru: Laurie Gharis, Chief Clerk
Kelly Keel, Executive Director

From: Richard C. Chism, Director *RCC*
Office of Air

Docket No.: 2023-1658-MIS

Subject: Commission Approval for Adoption of Air Quality Standard Permit for Natural Gas Electric Generating Units
Non-Rule Project No. 2024-005-OTH-NR

Background and reason(s) for the standard permit:

The Texas Commission on Environmental Quality (TCEQ or commission) is issuing a new non-rule air quality standard permit for natural gas fired electric generating units (EGUs) under the authority of the Texas Clean Air Act (TCAA), Texas Health and Safety Code (THSC), §382.05195, Standard Permit; and 30 Texas Administrative Code (TAC) Chapter 116, Subchapter F, Standard Permits. The standard permit analysis required by statute includes the evaluation of best available control technology (BACT) and is based on a comprehensive evaluation of air emissions and potential impacts. The new standard permit provides a preconstruction authorization that may be used by any natural gas fired EGU complying with the standard permit requirements provided the natural gas (NG) EGU is not prohibited by other local, state, or federal permitting statutes or regulations. The new standard permit provides applicants with greater operational flexibility than allowed under Permit by Rule (PBR) when seeking authorization of NG EGUs at a site and serves as an alternative option to the existing Air Quality Standard Permit for Electric Generating Units.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The standard permit authorizes NG EGUs that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid. The standard permit is only applicable to spark-ignited internal combustion engines firing natural gas and excludes boilers and turbines. It includes operating specifications and emission limitations for typical natural gas engines during routine operation and planned maintenance, startup, and shutdown (MSS). The standard permit can be used to reauthorize existing engines authorized under PBR or the existing EGU standard permit, provided that the entire engine is reauthorized under the NG EGU standard permit. The standard permit cannot be used to modify existing engines authorized under 30 TAC Chapter 116 Subchapter B, Subchapter C, or Subchapter G.

B.) Scope required by federal regulations or state statutes:

The standard permit is authorized by the TCAA, THSC, Chapter 382 and is based on a comprehensive evaluation of air emissions and applicable air quality standards.

C.) Additional staff recommendations that are not required by federal rule or state statute:

None.

Re: Docket No. 2023-1658-MIS

Statutory authority:

The proposed standard permit is adopted under:

- THSC, §382.011, General Powers and Duties
- THSC, §382.023, Orders
- THSC, §382.051, Permitting Authority of the Commission; Rules
- THSC, §382.0513, Permit Conditions
- THSC, §382.05195, Standard Permit

Effect on the:

A.) Regulated community:

The new standard permit serves as an alternative option to the existing Air Quality Standard Permit for EGUs by providing more flexibility when seeking authorization.

B.) Public:

The public will benefit from the non-rule standard permit because the conditions of the standard permit allow the commission to ensure that sites are operating under regulations that are protective of human health and the environment and meet BACT requirements.

C.) Agency programs:

Agency programs will not be significantly affected by the creation of the non-rule standard permit.

Stakeholder meetings:

The commission did not hold any stakeholder meetings related to the development of this standard permit. The new standard permit underwent an extended public comment period and a public meeting was held.

Public Involvement Plan

In addition to the statutory public notice requirements, TCEQ developed a public involvement plan to assess and determine public participation. A plain language summary was also made available to the public.

Alternative Language Requirements

Notice of the proposed standard permit was published in both English and Spanish in the Austin, Dallas, and Houston areas, and made available on TCEQ's website. A plain language summary and the Executive Summary was provided in English and Spanish on TCEQ's website. The public was also provided an opportunity to request additional communication accommodations, including live translation services, for the public meeting.

Public comment:

The commission held a public meeting on July 30, 2024. An extended public comment period was provided which closed at midnight on July 30, 2024. Written comments were received. Commenters generally expressed support for the proposed new standard permit, while offering additional recommendations for changes. One commenter

Re: Docket No. 2023-1658-MIS

expressed concerns about the usefulness of the new standard permit and believes the operational and emission limitations, recordkeeping, and monitoring requirements limits application to many facilities. Please consult the Analysis of Comments section within the technical background summary document for a full description of the comments and TCEQ's detailed responses.

Significant changes from proposal:

None.

Potential controversial concerns and legislative interest:

There have been no known controversial concerns or legislative interest.

Will this rulemaking affect any current policies or require development of new policies?

No. This standard permit will not significantly affect internal policies.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

If the non-rule standard permit does not go forward, applicants for NG EGUs needing greater operational flexibility than allowed under PBR authorizations will need to be authorized under the existing Air Quality Standard Permit for Electric Generating Units or under a case-by-case new source review permit. There are no other practical alternatives to the non-rule standard permit.

Key points in the adoption rulemaking schedule:

Texas Register proposal publication date: June 28, 2024

Anticipated adoption date: January 30, 2025

Anticipated *Texas Register* adoption publication date: February 14, 2025

Anticipated effective date: January 30, 2025

Agency contacts:

Stephanie Heath, Rule Project Manager, Air Permits Division, (512) 239-5654
Booker Harrison, Senior Attorney, Environmental Law Division, (512) 239-4113
Gwen Ricco, Texas Register Rule/Agenda Coordinator, General Law Division, (512) 239-2678

Attachments:

None.

cc: Chief Clerk, 2 copies
Executive Director's Office
Jim Rizk
Krista Kyle
Jessie Powell
Office of General Counsel
Stephanie Heath
Booker Harrison
Gwen Ricco

Air Quality Standard Permit for Natural Gas Electric Generating Units

DRAFT - Effective xx/xx

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Table 3: Emission Standards, per Engine

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PM	0.0008
PM ₁₀	0.0008
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Formaldehyde	0.3

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- (2) Compliance with the NO_x and CO emission limits shall be demonstrated in accordance with sections (f)(4) and (f)(5).

(f) Operational Requirements

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 - (B) Stack sampling and other testing shall be performed as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the engine(s) to demonstrate compliance with any emission rate represented in the registration and emission standards listed in subsection (e)(1). The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual (including but not limited to the TCEQ Guidelines for Stack Sampling Facilities and Submitting a Complete Air Emission Test Report) and the U.S. EPA Stack Testing Guidance.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) testing requiring EPA approval shall be submitted to the TCEQ regional office. The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The TCEQ regional office must approve any deviation from specified sampling procedures.

- (i) The appropriate TCEQ regional office shall be notified through the TCEQ Stack Testing Online Reporting System (STORS) no less than 45 days prior to sampling. The notice shall include:
 - 1. Proposed date for pretest meeting.
 - 2. Date sampling will occur.
 - 3. Name of firm conducting sampling.
 - 4. Type of sampling equipment to be used.
 - 5. Method or procedure to be used in sampling.
 - 6. Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - 7. Procedure used to determine worst case emissions such as monitoring engine horsepower load during the sampling period.
- (C) The nitrogen dioxide (NO₂)-to-NO_x ratio shall be determined for the engine tested at full load and full speed.
- (D) Air contaminants emitted from the engines to be tested for include (but are not limited to) NO_x, CO, and oxygen (O₂).
- (E) Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facility and at such other times as may be required by the TCEQ executive director. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ regional office.
- (F) Engine emissions and exhaust flow rates shall be determined using EPA methodology approved by the TCEQ regional office prior to sampling. Emissions shall be sampled at four points over the normal load range of the engine, including the minimum and maximum of the range.
 - (i) At each test load, the following operating parameters shall be varied to identify the range over which the allowable emission limits are not exceeded: engine speed and heat rate. The NO_x emission levels measured by Reference Method 20 shall be adjusted accordingly. The unadjusted NO_x emission level shall be used to determine compliance with the brake-specific emission limits of this permit.

- (G) Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the TCEQ Regulatory Guidance RG-578 - Submitting a Complete Air Emissions Test Report. The reports shall be distributed as follows:
 - (i) One copy to the appropriate TCEQ regional office through STORS.
 - (ii) One copy to each local air pollution control program.
 - (H) Sampling ports and platform(s) shall be incorporated into the design of the source stack according to the specifications set forth in "Guidelines for Stack Sampling Facilities (Formerly Chapter 2)". Alternate sampling facility designs must be submitted for approval to the TCEQ regional office.
- (5) Continuous Demonstration of Compliance
- (A) The permit holder shall begin performing the following for the engine(s) represented in the registration within 180 days of the completion of initial stack testing per section (f)(4).
 - (i) Conduct evaluations of engine performance quarterly, with at least 60 days between tests, based on the calendar year, by measuring the NO_x, CO, and O₂ content of the exhaust. After four consecutive acceptable quarterly tests, the engine testing schedule may be changed to semiannually, with at least four months between tests, on approval by the TCEQ regional office.
 - (ii) The use of portable analyzers specifically designed for measuring the concentration of each contaminant in parts per million by volume is acceptable for these evaluations. A hot air probe or equivalent shall be used with portable analyzers to prevent error in results due to high exhaust gas temperatures. Three sets of measurements shall be averaged to determine the concentrations. Prior to and following the measurements, the portable analyzer shall be checked for accuracy using an audit gas that conforms to the specifications in 40 CFR Part 60, Appendix F, 5.1.2(3). Any other method approved by the appropriate TCEQ regional office is also acceptable.
 - (iii) If the portable analyzer is capable of measuring nitric oxide and nitrogen dioxide, then these measurements shall be summed to determine the NO_x emission rate. Emissions shall be measured and recorded in the as-found operating condition, except no compliance determination shall be established during start-up, shutdown, or under breakdown conditions.
 - (iv) Emissions calculations shall be used to convert the portable analyzer data to a clear demonstration of compliance with the allowable pounds per hour of NO_x and CO represented in the registration on a quarterly or semiannual basis, per subparagraph (4)(A)(i), for the engine.
 - (v) If the engine is out of operation for more than one year, other than for maintenance and readiness checks, the performance of the engine shall be evaluated within the first 200 operating hours after returning the engine to service.

- (vi) Within 14 days after each occurrence of engine maintenance that is reasonably expected to affect emissions, such as oxygen sensor replacement, air fuel ratio controller replacement, catalyst cleaning, or catalyst replacement, the engine shall be tested for NO_x and CO emission limits in this permit.
 - (vii) Install and operate a monitoring device capable of recording the inlet flue gas temperature to the catalyst. The monitoring device shall be calibrated according to the manufacturer's specifications or at least annually. The monitoring device shall be accurate to 2% of reading or 2.5 degrees Celsius.
 - (B) An O₂ or NO_x sensor shall be installed on the engine. The sensor shall be maintained and replaced per manufacturer recommendations. The sensor shall be connected to a visible or audible indicator of the proper O₂, or NO_x content and checks of the indicator shall be made at least daily.
 - (C) The permit holder shall either measure, or develop a program to calculate, the total mass flow rate through the stack to ensure continuous compliance with the emission limitations represented in the registration. After the initial demonstration of compliance, ongoing compliance with the NO_x and CO per year emission rates represented in the registration shall be demonstrated by calculating rolling 12-month annual emissions from emission factors (lb/MMBtu, HHV) obtained from the results of the sampling required by paragraph (f)(5)(A)(i) and the monthly total heat input (MMBtu, HHV) from natural gas fuel.
- (6) Opacity Requirements
- (A) No visible emissions shall leave the property. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA Test Method (TM 22) or equivalent.

Air Quality Standard Permit for Natural Gas Electric Generating Units
Texas Commission on Environmental Quality
Effective January 30, 2025

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I. Executive Summary

The Texas Commission on Environmental Quality (TCEQ or commission) issues a non-rule air quality standard permit for natural gas fired electric generating units (EGUs) that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid. The new standard permit provides applicants with greater operational flexibility than allowed under Permit by Rule (PBR) when seeking authorization of natural gas (NG) EGUs at a site and serves as an alternative option to the existing Air Quality Standard Permit for Electric Generating Units. The new standard permit is authorized by the Texas Clean Air Act (TCAA), Texas Health and Safety Code (THSC) Chapter 382 and is based on a comprehensive evaluation of air emissions and potential impacts.

II. Explanation and Background of Air Quality Standard Permit

The commission issues an air quality standard permit authorizing EGUs firing natural gas under the authority of THSC §382.05195, Standard Permit, and Title 30 Texas Administrative Code (30 TAC) Chapter 116, Subchapter F, Standard Permits.

The new standard permit provides a preconstruction authorization that may be used by any natural gas fired EGU complying with the standard permit requirements provided the NG EGU is not prohibited by other local, state, or federal permitting statutes or regulations. The existing Air Quality Standard Permit for Electric Generating Units is more frequently used by EGUs using fuel sources other than natural gas, such as diesel. The new standard permit provides applicants with greater operational flexibility than allowed under PBR when seeking authorization of NG EGUs at a site and serves as an alternative option to the existing Air Quality Standard Permit for Electric Generating Units. However, it is not intended to provide an authorization mechanism for all possible unit configurations or for unusual operating scenarios. Owners or operators of those potential facilities that cannot meet the standard permit conditions may apply for a case-by-case review of an air quality permit under 30 TAC §116.111 or other authorization mechanism.

III. Overview of Air Quality Standard Permit

The new standard permit authorizes NG EGUs used to generate electricity for use by the owner or operator, and/or generate electricity to be sold to the electric grid. The standard permit is only applicable to spark-ignited internal combustion engines that fire natural gas and excludes boilers and turbines. It includes operating specifications and emission limitations for typical natural gas engines during routine operation and planned maintenance, startup, and shutdown (MSS). The standard permit can be used to reauthorize existing engines authorized under PBR or the existing EGU standard permit, provided that the entire engine is reauthorized under the NG EGU standard permit. The standard permit cannot be used to modify existing engines authorized under 30 TAC Chapter 116 Subchapter B, Subchapter C, or Subchapter G.

The standard permit analysis is required by statute to include best available control technology (BACT) for each source. BACT is defined in 30 TAC §116.10(1) as an air pollution control method for a new or modified facility that through experience and research, has proven to be operational, obtainable, and capable of reducing or eliminating emissions from the facility, and is considered technically practical and economically reasonable for the facility; and the emissions reduction can be achieved through technology such as the use of add-on control equipment or by enforceable changes in production processes, systems, methods, or work practice. The BACT requirements included in the NG EGU standard permit are based on meeting or being more stringent than existing TCEQ Tier I BACT requirements. The BACT requirements are commonly used for these sources and operation types. TCEQ Tier I BACT

requirements for spark ignited internal combustion engines include: minimizing the duration and occurrence of MSS activities, good combustion practices, limiting the firing to fuels which meet the requirements of Title 40 Code of Federal Regulations (40 CFR) §72.2, no visible emissions leaving the property, limiting volatile organic compound (VOC) emissions to 1.0 grams per brake-horsepower-hour (g/bhp-hr), limiting nitrogen oxides (NO_x) emissions to 0.5 g/bhp-hr, and limiting carbon monoxide (CO) emissions to 3.0 g/hp-hr.

This standard permit requires NG EGUs to comply with certain requirements, including but not limited to the following: administrative requirements, including registration and fee requirements; general requirements; operational and design requirements; recordkeeping requirements; and executive director (ED) approval. This standard permit requires renewal of the registration every 10 years.

Applicants are required to submit emission calculations for all sources of emissions using TCEQ approved calculation methodologies. Authorized emissions are limited to those represented in the registration, not to exceed the emission limits in Table 2 of the standard permit.

Applicants are required to calculate emissions at the highest represented operating rates. Examples of operating rates would include firing rates, throughputs, and other measurable activities. Individual contaminants from the EGU should be calculated based on supporting documentation using appropriate analysis, manufacturers' guarantees, or other data, and this documentation must be included in the registration application.

Initial performance testing and re-certification is required for the stationary spark-ignited internal combustion engine and any associated control device(s) to demonstrate compliance with representations made in the registration application. All testing must be coordinated with the TCEQ regional office as outlined in the standard permit. If the stationary spark-ignited internal combustion engine and control device are certified as required by 40 CFR Part 60 Subpart JJJJ and operated and maintained according to the manufacturer's emission-related written instructions, then the permit holder must keep records of conducted maintenance to demonstrate compliance, but no initial determination of compliance nor continuous demonstration of compliance testing is required.

IV. Permit Condition Analysis and Justification

The following demonstrates how each section of this standard permit is enforceable and how the commission can adequately monitor compliance with the permit conditions.

Applicability

Subsection (a)(1) outlines the authorization of NG EGUs that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid.

Subsection (a)(2) requires owners and operators to comply with all applicable provisions of the THSC, Texas Water Code, the rules of the commission, and any other applicable federal, state, or local regulations. If operations or activities cannot meet the limitations or requirements of this standard permit, the site cannot be authorized by this standard permit.

Subsection (a)(3) prohibits the use of the standard permit for NG EGUs that meet the definition of a new major stationary source or major modification as defined in 30 TAC §116.12 (Nonattainment and Prevention of Significant Deterioration review Definitions).

Subsection (a)(4) requires that EGUs authorized under this standard permit shall only use pipeline-quality natural gas. The subsection also prohibits the use of the new standard permit to authorize boilers and turbines, since there are existing alternative authorization mechanisms containing appropriate technical requirements for these types of facilities.

Definitions

Subsection (b)(1) establishes that the words and terms in this standard permit have the meanings listed in 30 TAC Chapter 116, Subchapter A (Definitions), unless the context indicates otherwise. Unless specifically defined in the TCAA or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control.

Administrative Requirements

Section (c) establishes the administrative requirements for the use of the NG EGU standard permit. Subsection (c)(1) requires that the applicant receive written approval from TCEQ confirming that the facility meets the terms and conditions of the standard permit in order to begin construction or operation of facilities. Subsection (c)(2) outlines the general requirements for standard permit authorizations found in 30 TAC Chapter 116 are applicable to facilities authorized under the new standard permit, including registration requirements, fee requirements, and other specific conditions within the rule language. The emission limitations in 30 TAC §116.610(a)(1), Applicability, are excluded in this standard permit.

Subsections (c)(3) through (c)(4) establishes the recordkeeping requirements for compliance with the standard permit. Subsection (c)(3) requires that the records be available for review by TCEQ, the Environmental Protection Agency (EPA), or local air pollution control agency personnel. Subsection (c)(4) specifies that copies of the permit, the application and any subsequent representations submitted to TCEQ, the manufacturer's design and operation specifications, all emission-related maintenance, and the initial compliance testing be kept for the life of the permit. Subsection (c)(5) specifies the records to be kept for a period of five years include: hours of operation and natural gas usage on a monthly and rolling 12-month basis; sulfur content of the natural gas; emission-related maintenance; visible emissions observations and corrective actions taken; and sampling performed to evaluate emissions.

General Requirements

Section (d) establishes general requirements for NG EGUs operating under the standard permit. Among these requirements are specific guidelines for engine location, stack height, stack diameter, minimum stack exit temperature, and velocity.

Section (d) establishes requirements regarding the number of engines that may be authorized under this standard permit. Subsection (d)(2) requires that engines be located at least 25 feet from the nearest point on the property line. Subsection (d)(2) includes a reference table (Table 1: Engine Distance Limitations) identifying the minimum distance from the property line to the nearest engine. As shown in the table, the minimum distance of an engine to the nearest property line is dependent on the number of engines authorized under the standard permit. The maximum allowable number of engines must not exceed six.

Subsection (d)(3) requires that a non-resettable run time meter must be installed on the engine(s).

Emission Limitations

Section (e) establishes the obligations of the owner or operator to ensure protection of public health and welfare through compliance with the applicable emission limits of each pollutant.

Subsection (e)(1) lists the emission limits (Table 2: Emissions Limitations, per Engine) and emission standards (Table 3: Emission Standards, per Engine) for engine air contaminants. These contaminants include NO_x, CO, VOC, and particulate matter, including particulate matter equal to or less than 10 microns in diameter (PM₁₀), particulate matter equal to or less than 2.5 microns in diameter (PM_{2.5}), sulfur dioxide (SO₂), sulfuric acid (H₂SO₄), and formaldehyde. These maximum limits and emission standards were set based on BACT and acceptable air quality analyses and health effects for typical EGU engines. Emission limits for SO₂ and H₂SO₄ are based on the fuel sulfur limit in subsection (f)(3) of the standard permit.

Subsection (e)(2) requires that compliance with NO_x and CO emission limits must be demonstrated per requirements in subsections (f)(4) and (f)(5) related to the initial and continuous compliance demonstrations.

Operational Requirements

Operational requirements in section (f) establishes specific operational and monitoring requirements for facilities authorized under this standard permit. These requirements were developed using the special conditions typically found in new source review (NSR) permits issued by TCEQ. This ensures that facilities authorized under this standard permit will meet air quality protectiveness, BACT, and best management practices (BMPs) to ensure proper operation of facilities authorized under this standard permit.

Subsection (f)(1) requires that emissions from each spark-ignited engine shall be limited to no more than 400 hours of operation in a rolling 12-month period.

Subsection (f)(2) requires that the engine and after-treatment control device must be operated and maintained according to the manufacturer's emission-related instructions.

Subsection (f)(3) details the operational requirements of the engine to include fuel specifications, monitoring of fuel usage, recordkeeping, and compliance demonstrations. These requirements are based on Tier I BACT.

Subsection (f)(4) and (f)(5) establishes requirements for initial determination of compliance and continuous demonstration of compliance for the engine and control device. Under paragraph (f)(4)(A), if the 40 CFR Part 60 Subpart JJJJ certified stationary spark-ignited internal combustion engine and control device are operated and maintained according to the manufacturer's emission-related written instructions and maintenance records are maintained, initial stack sampling and subsequent testing requirements found in paragraphs (f)(4)(B) – (H) and subsection (f)(5) are not required to be performed. Paragraph (f)(4)(A) also requires the owner or operator to re-certify a unit at least every three years to ensure continuing compliance with the emissions limitations.

Paragraphs (f)(4)(B) – (H) establishes specific requirements for stack sampling and initial determination of compliance. Sampling shall be conducted in accordance with TCEQ sampling guidelines (formerly Chapter 2 of the TCEQ Sampling Procedures Manual, www.tceq.texas.gov/compliance/investigation/air/air-stack), and EPA stack testing guidance (www.epa.gov/compliance/clean-air-act-national-stack-testing-guidance). If stack sampling is required, it must be coordinated with the TCEQ regional office in a pre-test notification through the TCEQ Stack Test Online Reporting System (STORS, www3.tceq.texas.gov/steers/) to determine methodologies and other details for the testing not outlined within the permit requirements.

Additionally, continuous compliance shall be demonstrated as outlined in subsection (f)(5).

Visible emission requirements are established in subsection (f)(6). Under this subsection, no visible emissions shall leave the property. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using EPA Test Method 22 (TM 22) or equivalent.

V. Protectiveness Review

TCEQ performed an air quality analysis (AQA) in support of the protectiveness review for the NG EGU standard permit. The AQA included generic modeling to determine the number of engines and set back distance from a property line that yield predictions that are less than significant impact levels (SILs) for criteria pollutants and less than two percent of the associated state property line (SPL) standard for pollutants with a SPL standard.

TCEQ performed the modeling using EPA's ISCST3 (version 04272) model. Modelers have been using the ISC model in permitting for more than 30 years. Developers created the model to be easy to use and to address complex atmospheric processes in a relatively simple way that all users can understand. Developers based the ISCST3 model on the Gaussian distribution equation and it is inherently conservative due to the main simplifying assumptions made in its derivation. These assumptions are:

- Conditions are steady-state (for each hour, emissions, wind speed, and direction are constant) and the dispersion from source to receptor is effectively instantaneous.
- There is no plume history as model calculations in each hour are independent of those in other hours.
- Mass is conserved (no removal due to interaction with terrain, deposition, or chemical transformation) and is reflected at the surface; and
- Plume spread from the centerline follows a normal Gaussian distribution and only vertical and crosswind dispersion occurs. The model ignores dispersion downwind.

TCEQ applied the model in a screening mode to ensure predictions were conservative and applicable for any location in the state. Additionally, using ISCST3 as a screening technique eliminate the need for more detailed modeling when those sources clearly will not cause or contribute to ambient concentrations in excess of the national ambient air quality standards (NAAQS) and SPL standards.

The modeling was conducted using both rural and urban dispersion coefficients. The higher concentration of the two options was used as the maximum predicted concentration. The modeling used the flat terrain option. Flat terrain is reasonable to use since it is consistent with typical site locations for these facilities and given that the maximum modeled predictions occur near the modeled source.

The modeling used a polar receptor grid with 36 radials spaced every 10 degrees from true north. Each radial includes a receptor beginning at 25 feet from the engine. Receptors were located at distances of 25, 50, and 100 feet, and every 100 feet out to 1000 feet from the engine. The modeling used surface meteorological data from Austin and upper-air meteorological data from Victoria for the years 1983, 1984, 1986, 1987, and 1988. Since the controlling analysis are primarily the short-term analyses, this five-year data set would include worst-case, short-term meteorological conditions that could occur anywhere in the state. The wind directions were set at 10-degree intervals to

coincide with the receptor radials. This would provide predictions along the plume centerline, which provides a conservative result.

The modeling represented emissions from engines as a single point source with a stack height of 25 feet, exit temperature of 961 Fahrenheit, exit velocity of 442 feet per second, and exit diameter of 8 inches.

The modeling included two different cases for the downwash analysis. Case 1 is a scenario in which there are no nearby structures; only the engine housing structure is used as input. The dimensions for a typical engine housing structure were used (horizontal dimension of approximately 30 feet by 10 feet, and a vertical dimension of 10 feet). Case 2 is a scenario that considers a nearby structure larger than the engine housing structure. The dimensions for the nearby structure are representative of a typical building (horizontal dimension of approximately 40 feet by 40 feet, and a vertical dimension of 25 feet). The worst-case predictions between the two were used in the AQA.

An emission rate of 1 lb/hr was used to predict generic short-term and annual concentrations from a single engine. The generic concentrations were multiplied by the emission rates listed in Table 2 of the standard permit to determine a maximum predicted concentration for each pollutant. The applicable thresholds (either SIL or 2 percent of SPL) were divided by the maximum predicted concentrations to determine the number of engines at each setback distance that yield predictions that are less than the thresholds. The modeling report is available upon request.

VI. Public Notice and Comment Period

In accordance with 30 TAC §116.603, Public Participation in Issuance of Standard Permits, TCEQ published notice of the proposed standard permit in the *Texas Register* and newspapers of the largest general circulation in Austin, Houston, and Dallas. Due to a publication error, some published notices were followed by a notification of correction in the same newspaper. The dates of the English-language publications were June 21 and June 26, 2024, in the *Austin-American Statesman*; June 28, 2024, in the *Dallas Morning News*; June 21 and June 26, 2024, in the *Houston Chronicle*; and June 28, 2024, in the *Texas Register*. The dates of the Spanish-language newspaper publications were June 20 and June 27, 2024, in *El Mundo* (Austin); June 23 and July 7, 2024, in *La Prensa de Houston*; and June 19 and July 3, 2024, in *Al Dia* (Dallas). An extended public comment period ran from the original date of publication until midnight on July 30, 2024.

Written comments were received during the public comment period; however, no revisions were made to the draft standard permit in response to the comments received. The final standard permit was considered by the commission for adoption. Upon adoption of the standard permit by the commission, the final standard permit and a response to all comments received is available on TCEQ's website.

VII. Public Meeting

The commission held a hybrid in-person and virtual public meeting on the proposed new standard permit in Austin on Tuesday, July 30, 2024. No oral comments were received.

VIII. Analysis of Comments

The commission received comments from Jeff L. Weiler (on behalf of Energy Transfer LP [Energy Transfer]), Paul Zink (on behalf of Mustang Machinery Co. LLC [Mustang Machinery]), and Tom McDonnell.

Comment 1:

Mustang Machinery and Tom McDonnell support the proposed natural gas fired electric generating unit (EGU) standard permit. Specifically, support was expressed for providing an additional reliability and resiliency option for the Texas grid. Mustang Machinery further states that, as written, the proposed standard permit provides more flexibility and an alternative option for natural gas (NG) lean burn spark ignited reciprocating internal combustion engine (SI RICE) EGUs during extreme weather events, when intermittent renewables are unavailable, and as a means to reduce load during critical times associated with demand growth while ensuring protection of the environment.

Response 1:

The commission appreciates the support and agrees that the new standard permit will ensure protection of human health and the environment while providing flexibility and an alternative option for these types of units.

Comment 2:

Energy Transfer stated that they question the usefulness of the proposed standard permit and believes that many of the limitations, recordkeeping, and monitoring requirements limit the application for many facilities. The commenter stated that, as written, many of the requirements are impossible to meet and would prohibit any of their existing or proposed electric generating facility operations from seeking authorization. The commenter further recommended use of the existing non-rule Oil & Gas Standard Permit as a template.

Response 2:

The new standard permit is not intended to authorize all possible unit configurations or unusual operating scenarios. The standard permit does not replace existing authorization options for electric generating units. Authorization under 30 TAC Chapter 106, Permits by Rule, standard permit, or a case-by-case new source review (NSR) permit under 30 TAC §116.111, General Application remain available for new or existing units. The development of the new standard permit involved researching permitted electric generating units and is based on actual engine data and compliance with all applicable air quality standards. The non-rule Oil & Gas Standard Permit was developed for a separate industry and was not considered as a technical basis for this new standard permit. The creation of this new standard permit allows EGU facilities to have greater operational flexibility than allowed under PBR authorizations and provides a streamlined authorization process allowing authorizations to be issued more efficiently than case-by-case NSR permits.

Comment 3:

Energy Transfer stated that stack parameter requirements such as the maximum stack diameter, minimum stack exhaust temperatures, and minimum exit velocity are not representative of typical engines used for the purpose of generating electricity.

Response 3:

This new standard permit is not intended to authorize all possible unit configurations or unusual operating scenarios. The development of this standard permit involved researching permitted EGUs and is based on actual engine data and their compliance with all applicable air quality standards. The new standard permit would provide applicants with greater operational flexibility than allowed under PBR when seeking authorization of natural gas EGUs at a site and serves as an alternative option to the existing Air Quality Standard Permit for Electric Generating Units.

Comment 4:

Energy Transfer expressed concern with the minimum distance limitations required for the operation of 4 to 6 engines. The commenter stated that these proposed distance requirements would be wasteful and cost prohibitive.

Response 4:

The distance requirements are based on the air quality analysis (AQA) performed as part of the protectiveness review during the standard permit development process. The AQA included generic modeling to determine the number of engines and set back distance from a property line that yield predictions that are less than significant impact levels (SILs) for criteria pollutants and less than two percent of the associated state property line (SPL) standard for pollutants with a SPL standard. Predicted concentrations less than the applicable SILs demonstrate that sources operating in accordance with the requirements of the standard permit would not cause or contribute to a violation of the NAAQS and ensures that the standard permit is protective at the property line and beyond.

Comment 5:

Energy Transfer stated that the emission limitations listed in Table 2 restricts the size of the engines to be authorized under the new standard permit. The commenter further stated that current typical installations have a greater horsepower (hp) rating than the size of the engines needed to meet the NO_x and CO emission limitations, even though the higher hp rating would meet the hourly emission standards listed in Table 3.

Response 5:

These maximum limits and emission standards were set based on best available control technology and acceptable air quality analyses for typical EGU engines. This new standard permit is not intended to authorize all possible unit configurations or unusual operating scenarios. The development of this standard permit involved researching permitted EGUs and is based on actual engine data and their compliance with all applicable air quality standards. Units authorized under this new standard permit will need to meet the requirements of Table 2 and Table 3 to ensure protection of public health and welfare.

Comment 6:

Energy Transfer expressed concern that the annual hours of operation limitation of 400 hours per rolling 12-month period does not provide sufficient operational time to justify the associated cost of installation, operation, and maintenance of a new EGU.

Response 6:

The new standard permit would provide applicants with greater operational flexibility than allowed under PBR when seeking authorization of NG EGUs at a site and serves as an alternative option to the existing Air Quality Standard Permit for Electric Generating Units. The operational limitation of 400 hours per rolling 12-month period is based on the air dispersion modeling used for the protectiveness review. The results of the air dispersion modeling determined the operational hours that yield predictions that are less than the SILs and ensures that the standard permit is protective at the property line and beyond. The regulated community may pursue an alternative authorization mechanism if this new standard permit does not provide the needed authorized annual operational hours.

Comment 7:

Energy Transfer stated that requiring installation of a continuous parametric monitoring device to record the inlet flue gas temperature to the catalyst exceeds normal requirements for minor sources. The commenter stated that this requirement is consistent with monitoring requirements for major sources of hazardous air pollutants

under 40 CFR Part 63, Subpart ZZZZ; therefore, it is cost prohibitive and inconsistent with normal recordkeeping and monitoring requirements for similar sources.

Response 7:

The operational requirements were developed using the special conditions typically found in case-by-case NSR permits issued by TCEQ. This ensures that facilities authorized under this standard permit will demonstrate compliance with and achieve BACT and best management practices as required by statute and to ensure proper operation and adequate monitoring of facilities authorized under this standard permit.

IX. Statutory Authority

This standard permit is issued under THSC, §382.011, General Powers and Duties, which authorizes the commission to control the quality of the state's air, THSC §382.023, Orders, which authorizes the commission to issue orders necessary to carry out the policy and purposes of the TCAA, THSC §382.051, Permitting Authority of the Commission; Rules, which authorizes the commission to issue permits, including standard permits for similar facilities for numerous similar sources, THSC §382.0513, Permit Conditions, which authorizes the commission to establish and enforce permit conditions consistent with Subchapter C of the TCAA, and THSC §382.05195, Standard Permits, which authorizes the commission to issue standard permits according to the procedures set out in that section.

Texas Commission on Environmental Quality



ORDER ISSUING A NEW AIR QUALITY STANDARD PERMIT

Docket No. 2023-1658-MIS
Non-Rule Project No. 2024-005-OTH-NR

On January 30, 2025, the Texas Commission on Environmental Quality (Commission) issued an Air Quality Standard Permit for Natural Gas Electric Generating Units under 30 Texas Administrative Code Chapter 116, Subchapter F, concerning Standard Permits. Notice of the proposed air quality standard permit was published in the June 28, 2024, issue of the *Texas Register* (49 TexReg 4834).

IT IS THEREFORE ORDERED BY THE COMMISSION that the Air Quality Standard Permit for Natural Gas Electric Generating Units as considered by the Commission during its public meeting on January 30, 2025, is hereby issued. The Commission further authorizes staff to make any non-substantive revisions to the Air Quality Standard Permit for Natural Gas Electric Generating Units notice necessary to comply with *Texas Register* requirements. The issued Air Quality Standard Permit for Natural Gas Electric Generating Units as well as the introductory language, statutory authority, and response to comments are incorporated by reference in this Order as if set forth at length verbatim in this Order.

The effective date of the issued Air Quality Standard Permit for Natural Gas Electric Generating Units is January 30, 2025.

If any portion of this 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.

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Jon Niermann, Chairman

Date Signed

DRAFT