State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
HENRY COUNTY
Application No: 03-13389
DATE: 3/8/00

PG& E Dispersed Generating Company, LLC
Harry Rubin
7500 Old Georgetown Road
Bethesda, MD 20814

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **NWDO**
IN **MI**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: To be entered upon final issuance**
Terms and Conditions	**Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 03-13389

Application Number:	03-13389
APS Premise Number:	0335010056
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	PG& E Dispersed Generating Company, LLC
Person to Contact:	Harry Rubin
Address:	7500 Old Georgetown Road Bethesda, MD 20814

Location of proposed air contaminant source(s) [emissions unit(s)]:
775 Interchange Drive
Napoleon, **Ohio**

Description of proposed emissions unit(s):
NG Fired Turbines for Peaking Station

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may

lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
NOx	42.2
PE	11.4
SO2	4.6
CO	91.4
VOC	7.4
ammonia	11.1
formaldehyde	2.2
sulfuric acid	1.4

PART II - SPEC
IAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P001 - GE Frame 5LA natural gas fired combustion turbine with maximum generating capacity of 16.5 MW controlled with a selective catalytic reduction (SCR) system	OAC Rule 3745-31-05 (A)(3)	
		OAC Rule 3745-31-05 (D) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements
		OAC Rule 3745-17-11 (B)(4)
		OAC Rule 3745-17-07
		OAC rule 3745-18-06(F)
		40 CFR part 60, Subpart GG

Applicable Emissions Limitations/Control Measures	
	any stack shall not exceed 10 percent opacity as a six-minute average
nitrogen oxides (NO_x) emissions shall not exceed 14 ppmvd at 15% Oxygen	operational restriction, see B. 1.
0.0516 lbs NO_x/MM Btu heat input 13.12 lbs NO_x/hr	14.8 tons NO_x per rolling 12 month period 32.0 tons CO per rolling 12 month period
0.0140 lb particulate emissions (PE)/ MM Btu heat input 3.56 lbs PE/hr & 4.0 tons PE/yr	see A.2.a. see A.2.a.
0.0057 lb sulfur dioxide (SO_2)/MM Btu heat input 1.45 lbs SO_2 /hr & 1.6 tons SO_2/yr	see A.2.a. see A.2.b.
0.1120 lbs carbon monoxide (CO)/ MM Btu heat input 28.47 lbs CO /hr	
0.0090 lbs volatile organic compounds (VOC) /MM Btu heat input 2.29 lbs VOC/hr & 2.6 tons VOC/yr	
3.46 lbs ammonia/hr & 3.9 tons ammonia/yr	
0.69 lb formaldehyde/hr & 0.8 tons formaldehyde/yr	
0.43 lb sulfuric acid/hr & 0.5 tons sulfuric acid/yr	
Visible particulate emissions from	

2. Additional Terms and Conditions

2.a The emissions limit based on this applicable rule is equivalent to or less stringent than the limit established pursuant to OAC rule 3745-31-05.

2.b The emissions limits based on this applicable rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.

B. Operational Restrictions

1. The maximum annual hours of operation for emissions unit P001 shall not exceed 2,250 hours, based upon a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months following the startup of this emissions unit the permittee shall not exceed the monthly hours of operation restrictions specified in the following table:

Month	Cumulative hours of Operation
1	400
1-2	800
1-3	1200
1-4	1600
1-5	2000
1-12	2,250

After the first 12 calendar months following the startup of emissions unit P001, compliance with the annual hours of operation restriction shall be based on a rolling, 12-month summation.

2. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.0068 percent by weight.

3. As specified in the permittee's PTI application, the design electric output of this unit is 16.5 MW, measured at the generator terminal. This value corresponds to a maximum NG flow of 254,216 cf/hr with a heat content of 1000 Btu/cf (254.2 MM Btu/hr). The permittee shall operate this emissions unit within the design electric output of the system except for startup and shutdown. Start-up shall be defined as the time necessary to bring the SCR unit to it's minimum operating

temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 30 minutes in duration.

4. With the exception of start-up and shut-down as denoted in term B.3., emission unit P001 shall not be operated at or below 100% capacity (load).

5. The emission limitations specified in this permit were established using the Ohio EPA's "Air Toxic Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling:

   Pollutant: Formaldehyde
   TLV (ug/m3): 273 (Converted from the STEL)
   Maximum Hourly Emission Rate (lbs/hr): 2.21*
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4.67
   MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
TLV (ug/m3): 1000
Maximum Hourly Emission Rate (lbs/hr): 1.43*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.02
MAGLC (ug/m3): 23.8

Pollutant: Ammonia
TLV (ug/m3): 17000
Maximum Hourly Emission Rate (lbs/hr): 11.2*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.5
MAGLC (ug/m3): 404.8

* This was modeled for emissions units P001 & P002 combined.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours;

   b. during the first 12 calendar months of operation, the permittee shall record the cumulative operating hours for each calendar month; and

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.

   d. in lb(s)/hr emissions rate* for NO_x and CO;

   e. during the first 12 calendar months of operation, the cumulative NO_x and CO emissions, in tons (i.e., b x d, for each pollutant); and

   f. beginning after the first 12 calendar months of operation, the rolling, 12-month NO_x and CO emissions, in tons (i.e., c x d, for each pollutant).

   * As determined by the most recent testing data available for each respective pollutant.

2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

3. The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW) and fuel flow (in cu ft or million cu ft).

4. The permittee shall determine compliance with the sulfur content standard as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. The permittee shall determine the heat content of the fuels using ASTM method D240. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, Central District Office. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, Central District Office. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75.

5. The permittee shall install, operate, and maintain equipment to continuously monitor* and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

   The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard (with an hourly averaging period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

   * The installation and operation of systems to continuously monitor and record emissions of NO_x may be performed in lieu of monitoring the nitrogen content of the natural gas being fired in the turbine, as required by 40 CFR 60.334(b).

6. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

   a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and

   b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days

after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

3. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition B.3. above, malfunctions, etc.), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

5. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.0068 percent by weight. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

6. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition B.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

7. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P001 in accordance with this permit.

8. Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. construction date (no later than 30 days after such date);

   b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

   c. actual start-up date (within 15 days after such date); and,

   d. date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   P. O. Box 163669
   Columbus, Ohio 43216-3669

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, Ohio 43402

   This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable."

E. Testing Requirements/Compliance Methods Determinations

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the NO_x outlet concentration, the lbs/MM Btu limitations for NO_x *, CO, VOC, and PE, and the mass emissions limitations for NO_x, CO, Formaldehyde, VOC, and PE.

c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for PE, Method 5 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011, Appendix A; for VOC Method 25 of 40 CFR Part 60, Appendix A; and for CO Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The testing shall be performed at peak load (as defined by 40 CFR part 60.331), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

* In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing requirements in accordance with this permit.

2. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous NO_x monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and

witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

3. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

a. Emission Limitation
NO_x emissions shall not exceed 14 ppmvd at 15% Oxygen
0.0516 lb NO_x/MM Btu heat input
13.12 lbs NO_x/hr & 14.8 tons NO_x per rolling 12 month period

Applicable Compliance Method
Compliance with the allowable outlet concentration, and the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by the record keeping required in condition C.1.

b. Emission Limitation
0.0140 lb PE/MM Btu heat input
3.56 lbs PE/hr & 4.0 tons PE/yr

Applicable Compliance Method
Compliance with the lbs/hr and lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

c. Emission Limitation
0.0057 lb SO_2/MM Btu heat input
1.45 lbs SO_2/hr & 1.6 tons SO_2/yr

Applicable Compliance Method
Compliance with the lb/MM Btu heat input emission limitation shall be demonstrated by the monitoring & record keeping requirements in condition C.4. Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the above lb/MM Btu heat

input emission factor by the maximum Btu rating of 254.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

d. Emission Limitation
0.0090 lb VOC /MM Btu heat input
2.29 lbs VOC/hr & 2.6 tons VOC/yr
Applicable Compliance Method
The 0.009 pound(s) of VOC/MM Btu heat input is the vendor specification for a Redding, CA GE Frame 5 peaking unit with high temp SCR and is an appropriate emission factor for this emissions unit. Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the above emission factor by the maximum Btu rating of 254.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

e. Emission Limitation
0.1120 lb CO /MM Btu heat input
28.47 lbs CO/hr & 32.0 tons CO per rolling 12 month period

Applicable Compliance Method
Compliance with the lbs/hr and lb/MM Btu heat input emissions limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by the record keeping required in condition C.1.

f. Emission Limitation
3.46 lbs/hr ammonia & 3.9 tons ammonia/yr

Applicable Compliance Method
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0136 pound of ammonia/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating of 254.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

g. Emission Limitation

0.69 lb/hr formaldehyde & 0.8 ton formaldehyde/yr

Applicable Compliance Method
Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0027 pound of formaldehyde/MM Btu heat input (AP-42 Table 3.1-2 dated 10/96) by the maximum Btu rating of 254.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

h. Emission Limitation
0.43 lb/hr sulfuric acid & 0.5 ton sulfuric acid/yr

Applicable Compliance Method
Compliance with the lb/hr emissions limitation shall be demonstrated by multiplying the emission factor of 0.0017 pound of sulfuric acid/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating of 254.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

i. Emission Limitation
Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method
Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

F. Miscellaneous Requirements

1. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

2. Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

3. In accordance with good engineering practices, the SCR unit on emissions unit P001 shall be installed, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation & maintenance manual, as provided by the manufacturer.

4. In accordance with OAC rule 3745-31-05(D), sections A, B.1 through B.3, C.1 through C.5, D, E, and F of the terms and conditions constitute the federally enforceable portions of this permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P002 -GE Frame 5LA natural gas fired combustion turbine with maximum generating capacity of 33.0 MW controlled with a selective catalytic reduction (SCR) system	OAC rule 3745-31-05(A)(3)	
		OAC Rule 3745-31-05 (D) Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and Title V requirements
		OAC Rule 3745-17-11 (B)(4)
		OAC Rule 3745-17-07
		OAC rule 3745-18-06(F)
		40 CFR Part 60, Subpart GG
		40 CFR Part 75
		OAC rule 3745-103

Applicable Emissions Limitations/Control Measures	
	any stack shall not exceed 10 percent opacity as a six-minute average
nitrogen oxides (NO_x) emissions shall not exceed 14 ppmvd at 15% Oxygen	operational restriction, see B. 1.
0.0516 lbs NO_x/MM Btu heat input 24.37 lbs NO_x/hr	27.4 tons NO_x per rolling 12 month period
0.0140 lb particulate emissions (PE)/ MM Btu heat input 6.61 lbs PE/hr & 7.4 tons PE/yr	59.5 tons CO per rolling 12 month period see A.2.a. see A.2.a.
0.0057 lb sulfur dioxide (SO_2)/MM Btu heat input 2.69 lbs SO_2 /hr & 3.0 tons SO_2/yr	see A.2.a. see A.2.c.
0.1120 lbs carbon monoxide (CO)/ MM Btu heat input 52.88 lbs CO /hr	see A.2.b. see A.2.b.
0.0090 lbs volatile organic compounds (VOC) /MM Btu heat input 4.25 lbs VOC/hr & 4.8 tons VOC/yr	
6.43 lbs ammonia/hr & 7.2 tons ammonia/yr	
1.27 lbs formaldehyde/hr & 1.4 tons formaldehyde/yr	
0.80 lb sulfuric acid/hr & 0.9 ton sulfuric acid/yr	
Visible particulate emissions from	

Emissions Unit ID: **P002**

2. Additional Terms and Conditions

2.a The emissions limit based on this applicable rule is equivalent to or less stringent than the limit established pursuant to OAC rule 3745-31-05.

2.b If the permittee is subject to the requirements of 40 CFR Part 75 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

2.c The emissions limits based on this applicable rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60 Subpart GG.

B. Operational Restrictions

1. The maximum annual hours of operation for emissions unit P002 shall not exceed 2,250 hours, based upon a rolling, 12-month summation.

   To ensure enforceability during the first 12 calendar months following the startup of this emissions unit the permittee shall not exceed the monthly hours of operation restrictions specified in the following table:

Month	Cumulative hours of Operation
1	400
1-2	800
1-3	1200
1-4	1600
1-5	2000
1-12	2,250

   After the first 12 calendar months following the startup of emissions unit P002, compliance with the annual hours of operation restriction shall be based on a rolling, 12-month summation.

2. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.0068 percent by weight.

3. As specified in the permittee's PTI application, the design electric output of this unit is 16.5 MW, measured at the generator terminal. This value corresponds to a maximum NG flow of 254,216 cf/hr with a heat content of 1000 Btu/cf (254.2 MM Btu/hr). The permittee shall operate this emissions unit within the design electric output of the system except for startup and shutdown. Start-up shall be defined as the time necessary to bring the SCR unit to it's minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 30 minutes in duration.

1. With the exception of start-up and shut-down as denoted in term B.3., emission unit P002 shall not be operated at or below 100% capacity (load).

5. The emission limitations specified in this permit were established using the Ohio EPA's "Air Toxic Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling:

Pollutant: Formaldehyde
TLV (ug/m3): 273 (Converted from the STEL)
Maximum Hourly Emission Rate (lbs/hr): 2.21*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4.67
MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
TLV (ug/m3): 1000
Maximum Hourly Emission Rate (lbs/hr): 1.43*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.02
MAGLC (ug/m3): 23.8

Pollutant: Ammonia
TLV (ug/m3): 17000
Maximum Hourly Emission Rate (lbs/hr): 11.2*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.5
MAGLC (ug/m3): 404.8

* This was modeled for emissions units P001 & P002 combined.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. the operating hours;

b. during the first 12 calendar months of operation, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.

d. in lb(s)/hr emissions rate* for NO_x and CO;

e. during the first 12 calendar months of operation, the cumulative NO_x and CO emissions, in tons (i.e., b x d, for each pollutant); and

f. beginning after the first 12 calendar months of operation, the rolling, 12-month NO_x and CO emissions, in tons (i.e., c x d, for each pollutant).

* As determined by the most recent testing data available for each respective pollutant.

2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

3. The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW) and fuel flow (in cu ft or million cu ft).

4. The permittee shall determine compliance with the sulfur content standard as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. The permittee shall determine the heat content of the fuels using ASTM method D240. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, Central District Office. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, Central District Office. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75.

5. The permittee shall install, operate, and maintain equipment to continuously monitor* and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

   The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard (with an hourly averaging period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

   * The installation and operation of systems to continuously monitor and record emissions of NO_x may be performed in lieu of monitoring the nitrogen content of the natural gas being fired in the turbine, as required by 40 CFR 60.334(b).

6. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

   a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and

   b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

Emissions Unit ID: **P002**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

3. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition B.3. above, malfunctions, etc.), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

5. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.0068 percent by weight. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

6. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition B.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit

under section (A)(2).

7. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P002 in accordance with this permit.

8. Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

   a. construction date (no later than 30 days after such date);

   b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

   c. actual start-up date (within 15 days after such date); and

   d. date of performance testing (if required, at least 30 days prior to testing).

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - Permit Management Unit
   P. O. Box 163669
   Columbus, Ohio 43216-3669

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, Ohio 43402

   This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

   The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable."

E. Testing Requirements/Compliance Methods Determinations

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in

accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the NO_x outlet concentration, the lbs/MM Btu limitations for NO_x*, CO, VOC, and PE, and the mass emissions limitations for NO_x, CO, Formaldehyde, VOC and PE.

c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for PE, Method 5 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011 Appendix A; for VOC Method 25 of 40 CFR Part 60, Appendix A; and for CO Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The testing shall be performed at peak load (as defined by 40 CFR part 60.331), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

* In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing requirements in accordance with this permit.

2. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous NO_x monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

3. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

   a. <u>Emission Limitation</u>
   NO_x emissions shall not exceed 14 ppmvd at 15% Oxygen
   0.0516 lb NO_x/MM Btu heat input
   24.37 lbs NO_x/hr & 27.4 tons NO_x per rolling 12 month period

   <u>Applicable Compliance Method</u>
   Compliance with the allowable outlet concentration, and the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition E.1. Compliance with the annual emission limitation shall be determined by the record keeping required in condition C.1.

   b. <u>Emission Limitation</u>
   0.0140 lb PE/MM Btu heat input
   6.61 lbs PE/hr & 7.4 tons PE/yr

   <u>Applicable Compliance Method</u>
   Compliance with the lbs/hr and lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

c. Emission Limitation
0.0057 lb SO_2/MM Btu heat input
2.69 lbs SO_2/hr & 3.0 tons SO_2/yr

Applicable Compliance Method
Compliance with the lb/MM Btu heat input emission limitation shall be demonstrated by the monitoring & record keeping requirements in condition C.4. Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the above lb/MM Btu heat input emission factor by the maximum Btu rating of 472.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

d. Emission Limitation
0.0090 lb VOC /MM Btu heat input
4.25 lbs VOC/hr & 4.8 tons VOC/yr

Applicable Compliance Method
Compliance with the lbs/hr and lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

e. Emission Limitation
0.1120 lb CO /MM Btu heat input
52.88 lbs CO/hr & 59.5 tons CO per rolling 12 month period

Applicable Compliance Method
Compliance with the lbs/hr and lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by the record keeping required in condition C.1.

f. Emission Limitation
6.42 lbs/hr ammonia & 7.2 tons ammonia/yr

Applicable Compliance Method
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0136 pound of ammonia/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating of 472.2 MM Btu/hr. If required, the

permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

g. Emission Limitation
1.27 lb/hr formaldehyde & 1.4 tons formaldehyde/yr

Applicable Compliance Method
Compliance with the lbs/hr and lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing in condition E.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

h. Emission Limitation
0.80 lb/hr sulfuric acid & 0.9 ton sulfuric acid/yr

Applicable Compliance Method
Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0017 pound of sulfuric acid/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating of 472.2 MM Btu/hr. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 2250 hrs/yr and dividing by 2000 lbs/ton.

i. Emission Limitation
Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method
Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

F. Miscellaneous Requirements

1. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

2. Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

   Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

3. In accordance with good engineering practices, the SCR unit on emissions unit P002 shall be installed, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation & maintenance manual, as provided by the manufacturer.

4. In accordance with OAC rule 3745-31-05(D), sections A, B.1 through B.3, C.1 through C.5, D, E, and F of the terms and conditions constitute the federally enforceable portions of this permit to install.

NEW SC
PTI Num
FACILIT

Emissions Unit ID: **P002**

FACILITY DESCRIPTION NG Fired Turbines for Peaking Station CITY/TWP Napoleon

SIC CODE 4911 SCC CODE 2-03-002-02 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 16.5 MW Natural Gas Fired Turbine with SCR

DATE INSTALLED 4/01/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter				3.56	4.0
PM_{10}					
Sulfur Dioxide				1.45	1.6
Organic Compounds				2.29	2.6
Nitrogen Oxides				13.11	14.8
Carbon Monoxide				28.47	32.0
Lead					
Other: Formaldehyde Sulfuric Acid Ammonia				 0.69 0.43 3.46	 0.8 0.5 3.9

APPLICABLE FEDERAL RULES:

NSPS? GG NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination Use of SCR and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES NO

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, Sulfuric Acid, Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 03-13389 Facility ID: 0335010056

FACILITY NAME PG& E Dispersed Generating Company, LLC

FACILITY DESCRIPTION NG Fired Turbines for Peaking Station CITY/TWP Napoleon

Emissions Unit ID: **P002**

SIC CODE 4911 SCC CODE 2-03-002-02 EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 33.0 MW Natural Gas Fired Turbine with SCR

DATE INSTALLED 4/01/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter				6.61	7.4
PM_{10}					
Sulfur Dioxide				2.69	3.0
Organic Compounds				4.25	4.8
Nitrogen Oxides				24.37	27.4
Carbon Monoxide				52.88	59.5
Lead					
Other:					
Formaldehyde				1.27	1.4
Sulfuric Acid				0.80	0.9
Ammonia				6.42	7.2

APPLICABLE FEDERAL RULES:

NSPS? GG NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination Use of SCR and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? y

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, Sulfuric Acid, Ammonia

NEW SOURCE REVIEW FORM B

PTI Number: 03-13389 Facility ID: 0335010056

FACILITY NAME PG& E Dispersed Generating Company, LLC

FACILITY DESCRIPTION NG Fired Turbines for Peaking Station CITY/TWP Napoleon

Emissions Unit ID: **P002**

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

Copy of permit application & modeling information.
Correspondence is also included as it provided most recent emissions information.

Please provide any additional permit specific notes as you deem necessary:

This is one of three PG&E applications to be sent down from this office.
These will all have identical EUs, so the T&Cs will be identical as well.

Permit To Install Synthetic Minor Write-Up

A. Source Description

PG&E Dispersed Generating Company, LLC is planning to install a new peaking station in Napoleon Ohio, Henry County. The facility will generate electricity during periods of high demand to alleviate potential capacity shortfalls and will consist of one 33.0 MW natural gas fired electric generator and one 16.5 MW natural gas fired electric generator. PG&E Dispersed Generating Company, LLC wishes to limit the annual hours of operation of each generator to avoid Title V and PSD permitting requirements.

B. Facility Emissions

The facility will emit particulates, sulfur dioxide, organic compounds, nitrogen oxides , carbon monoxide, and hazardous air pollutants (formaldehyde). The facility's potential to emit any individual hazardous air pollutant and potential to emit the total combined hazardous air pollutants are below Title V thresholds. The pollutants that have a major source potential to emit are nitrogen oxides and carbon monoxide. At 8760 hrs, the facility has potential emissions of 164.2 tons per year (tpy) of nitrogen oxides and 356.4 tpy of carbon monoxide.

C. Operating Limitations

PG&E Dispersed Generating Company, LLC has requested a federally enforceable limit on their annual operating hours for each generator at 2,250 hours per rolling 12-month period. This would restrict the facility's potential emissions to 91.4 tons of carbon monoxide per rolling 12-month period and 42.2 tons of nitrogen oxides per rolling 12-month period.

D. Conclusions

By restricting annual hours of operation, the terms and conditions of this permit to install will limit the facility's nitrogen oxide and carbon monoxide emissions to less than PSD & Title V thresholds. Excursion reports will be required for each emissions unit to ensure compliance.

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year

4 **NEW SC**

PTI Num

FACILIT

Emissions Unit ID: **P002**

FACILITY DESCRIPTION NG Fired Turbines for Peaking Station CITY/TWP Napoleon

NOx	42.2
PE	11.4
SO2	4.6
CO	91.4
VOC	7.4
ammonia	11.1
formaldehyde	2.2
sulfuric acid	1.4