

**Synthetic Minor Determination and/or**  **Netting Determination**

Permit To Install **03-13497**  
PG&E Dispersed Generating

**A. Source Description**

PG & E Dispersed Generating Company, LLC is proposing to install two more turbines at the peaking station in Bowling Green, Ohio, in Wood County. The facility will generate electricity during periods of high demand to alleviate potential capacity shortfalls and will consist of a total of 97.5 MW (4 natural gas fired electric generators). 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 and Attainment Status**

The facility will emit particulates, sulfur dioxide, organic compounds, nitrogen oxides, carbon monoxide, and hazardous air pollutants (formaldehyde). The pollutants that have a major source potential to emit are nitrogen oxides and carbon monoxide. At 8760 hours, the facility has potential emissions of 335.06 tons per year (tpy) of nitrogen oxides and 727.16 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 86.06 tons of nitrogen oxides per rolling 12-month period and 186.77 tons of carbon monoxide per rolling 12-month period.

**D. Conclusion**

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 thresholds. Excursion reports will be required for each emissions unit to ensure compliance.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL  
WOOD COUNTY  
Application No: 03-13497**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
GG	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 2/6/2001

PG&E Disbursed 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 or 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  
Field Operations and Permit Section  
Division of Air Pollution Control



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 03-13497**

Application Number: 03-13497

APS Premise Number: 0387020378

Permit Fee: **To be entered upon final issuance**

Name of Facility: PG&E Disbursed 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)]:

**1225 North College Drive  
Bowling Green, Ohio**

Description of proposed emissions unit(s):

**2 Natural Gas fired Peaking Turbines.**

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. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## 2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

## 3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## 4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 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.

## 5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

## 6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. 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.

## **8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

## **9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## 10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

**11. 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.

**B. State Only Enforceable 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 of state-only enforceable 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 state-only required 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. 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.

**4. 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.

**5. 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.

**6. 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.

**7. 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.

**8. 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).

**9. 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.

**10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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.

**C. 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**

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	43.86
PE	11.90
SO2	4.86
CO	95.37
VOC	7.64

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None.

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None.

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - GE Frame 5LA natural gas fired combustion turbine with maximum generating capacity of 16.4 MW controlled with a selective catalytic reduction (SCR) system	OAC Rule 3745-31-05(A)(3)	<p>Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 14 ppmvd at 15% oxygen</p> <p>13.90 lbs NO<sub>x</sub>/hr</p> <p>0.0140 lb particulate emissions (PE)/MM Btu heat input 3.77 lbs PE/hr &amp; 4.24 tons PE/yr</p> <p>0.0057 lb sulfur dioxide (SO<sub>2</sub>)/MM Btu heat input 1.54 lbs SO<sub>2</sub>/hr &amp; 1.73 tons SO<sub>2</sub>/yr</p> <p>0.112 lbs carbon monoxide (CO)/MM Btu heat input 30.22 lbs CO/hr</p> <p>0.0090 lbs volatile organic compounds (VOC)/MM Btu heat input 2.42 lbs VOC/hr &amp; 2.72 tons VOC/yr</p> <p>Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average</p>
	OAC Rule 3745-31-05(D)	Operational restrictions, see B.1.
	Synthetic Minor to avoid Prevention of Significant Deterioration (PSD)	15.64 tons NO <sub>x</sub> per rolling 12 month period

and 112(g) applicability	34.0 tons CO per rolling 12 month period
	4.78 tons individual HAP per rolling 12 month period for emissions units P001, P002, P003, and P004 combined (See A.2.d)
	see A.2.a
	see A.2.a
OAC Rule 3745-17-11(B)(4)	see A.2.a
OAC Rule 3745-17-07	see A.2.c
OAC Rule 3745-18-06(F)	see A.2.b
40 CFR 60, Subpart GG	see A.2.b
40 CFR Part 75	
OAC Rule 3745-103	

**2. Additional Terms and Conditions**

- 2.a** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 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.
- 2.d** The total HAP emissions for all emissions units combined at this facility are less than 25 tons per year, therefore, only individual HAP emissions are restricted in this permit.

## II. Operational Restrictions

1. The maximum annual hours of operation for emissions unit P003 shall not exceed 2,250 hours, based upon a rolling, 12-month summation.

To ensure federal 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 P003, 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 16.4 MW, measured at the generator terminal. This value corresponds to a maximum NG flow of 269,440 cf/hr with a heat content of 1000 Btu/cf (269.44 MM Btu/hr) at 30 degrees Fahrenheit. 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 startup and shutdown, emissions unit P003 shall be operated at 100% load. The permittee may petition the Ohio EPA to operate at a greater load range if it can demonstrate to the agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit.
5. The Permittee shall not operate emission unit P003 if the ambient temperature falls below 30<sup>0</sup> F.

### **III. Monitoring and/or Recordkeeping 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. monthly emissions rate\* for NO<sub>x</sub>, CO, SO<sub>2</sub>, PE, VOC, and individual HAP;
  - e. the annual year to date emissions for SO<sub>2</sub>, PE, and VOC;
  - f. during the first 12 calendar months of operation, the cumulative NO<sub>x</sub>, CO, and individual HAP emissions, in tons; and
  - g. beginning after the first 12 calendar months of operation, the rolling, 12-month NO<sub>x</sub>, CO, and individual HAP emissions, in tons.

\*The permittee shall use the most recent testing data available for each respective pollutant. The monthly emission rate shall be determined by multiplying the mass emission rate of each pollutant by the hours of operation per month plus the total emissions from any start up or shut down period during the month. The individual HAP emissions shall be calculated for emission units P001, P002, P003, and P004 combined.

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 the 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, D4084-82, 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 40 CFR Part 75 as applicable, 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 40 CFR Part 75 as applicable.

5. Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor\* and record NO<sub>x</sub> 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<sub>x</sub> monitoring system, including, but not limited to, parts per million NO<sub>x</sub> on an instantaneous (one-minute) basis, emissions of NO<sub>x</sub> 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<sub>x</sub> 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).

#### **IV. 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 (ie., startup and shutdown periods as defined in Condition B.3. above, malfunctions, etc.), and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> 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 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.
7. In lieu of excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P003 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  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049

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."

## **V. Testing Requirements**

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<sub>x</sub> outlet concentration, the lbs/MM Btu limitations for CO, VOC, SO<sub>2</sub>, and PE, and the mass emissions limitations for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and PE. Emission testing shall also be conducted to determine the mass emission rate of formaldehyde.
  - c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO<sub>x</sub>, 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<sub>x</sub> monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and 40 CFR Part 75 as applicable. 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<sub>x</sub> 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 40 CFR Part 75 as applicable.

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

a. Emission Limitation

NO<sub>x</sub> emissions shall not exceed 14 ppmvd at 15% Oxygen  
13.90 lbs NO<sub>x</sub>/hr & 15.64 tons NO<sub>x</sub> 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  
3.77 lbs PE/hr & 4.24 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 the actual hours of operation and dividing by 2000 lbs/ton.

c. Emission Limitation

0.0057 lb SO<sub>2</sub>/MM Btu heat input  
1.54 lbs SO<sub>2</sub>/hr & 1.73 tons SO<sub>2</sub>/yr

Applicable Compliance Method

Compliance with 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 multiplying the hourly emission rate by the actual hours of operation and dividing by 2000 lbs/ton.

d. Emission Limitation

0.0090 lb VOC /MM Btu heat input

2.42 lbs VOC/hr & 2.72 tons VOC/yr

Applicable Compliance Method

Compliance with 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 multiplying the hourly emission rate by the actual hours of operation and dividing by 2000 lbs/ton.

e. Emission Limitation

0.1120 lb CO /MM Btu heat input

30.22 lbs CO/hr & 34.0 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

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.

**VI. Miscellaneous Requirements**

NONE

**B. State Only Enforceable Section**

**I. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - GE Frame 5LA natural gas fired combustion turbine with a maximum generating capacity of 16.4 MW controlled with a selective catalytic reduction (SCR) system		See B.III.

2. **Additional Terms and Conditions**

- 2.a NONE

**II. Operational Restrictions**

NONE

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this permit action as evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). This analysis is based upon the combined modeling of "all" air emission sources emitting air toxics that are contained in this PTI. The following summarizes the results of the modeling for the "worst case" pollutant(s) for all sources combined:

Pollutant: Formaldehyde

TLV (ug/m3): 273 (Converted from the STEL)

Maximum Hourly Emission Rate (lbs/hr): 4.23\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.73

MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid

TLV (ug/m3): 1000

Maximum Hourly Emission Rate (lbs/hr): 2.78\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.43

MAGLC (ug/m3): 23.8

Pollutant: Ammonia

TLV (ug/m3): 17000

Maximum Hourly Emission Rate (lbs/hr): 21.38\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.8

MAGLC (ug/m3): 404.8

\* This was modeled for emissions units P001, P002, P003, and P004 combined.

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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 previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the “Air Toxic Policy” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy:”

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

**IV. Reporting Requirements**

NONE

**V. Testing Requirements**

NONE

**VI. Miscellaneous Requirements**

NONE

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Westinghouse 301G natural gas fired combustion turbine with maximum generating capacity of 31.6 MW controlled with a selective catalytic reduction (SCR) system	OAC Rule 3745-31-05(A)(3)	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 14 ppmvd at 15% oxygen  25.08 lbs NO <sub>x</sub> /hr  0.0140 lb particulate emissions (PE)/MM Btu heat input 6.81 lbs PE/hr & 7.66 tons PE/yr  0.0057 lb sulfur dioxide (SO <sub>2</sub> )/MM Btu heat input 2.78 lbs SO <sub>2</sub> /hr & 3.13 tons SO <sub>2</sub> /yr  0.122 lbs carbon monoxide (CO)/MM Btu heat input 54.55 lbs CO/hr  0.0090 lbs volatile organic compounds (VOC)/MM Btu heat input 4.37 lbs VOC/hr & 4.92 tons VOC/yr  Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average
	OAC Rule 3745-31-05(D)	Operational restrictions, see B.1.

Synthetic Minor to avoid Prevention of Significant Deterioration (PSD) and 112(g) applicability	28.22 tons NO <sub>x</sub> per rolling 12 month period
	61.37 tons CO per rolling 12 month period
	4.78 tons individual HAP per rolling 12 month period for emissions units P001, P002, P003, and P004 combined (See A.2.d)
	see A.2.a
OAC Rule 3745-17-11(B)(4)	see A.2.a
OAC Rule 3745-17-07	see A.2.a
OAC Rule 3745-18-06(F)	see A.2.c
40 CFR 60, Subpart GG	see A.2.b
40 CFR Part 75	see A.2.b
OAC Rule 3745-103	

**2. Additional Terms and Conditions**

- 2.a** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 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.
- 2.d** The total HAP emissions for all emissions units combined at this facility are less than 25 tons per year, therefore, only individual HAP emissions are restricted in this permit.

**II. Operational Restrictions**

1. The maximum annual hours of operation for emissions unit P004 shall not exceed 2,250 hours, based upon a rolling, 12-month summation.

To ensure federal 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 P004, 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 31.6 MW, measured at the generator terminal. This value corresponds to a maximum NG flow of 486,350 cf/hr with a heat content of 1000 Btu/cf (486.35 MM Btu/hr) at 30 degrees Fahrenheit. 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 startup and shutdown, emissions unit P004 shall be operated at 100% load. The permittee may petition the Ohio EPA to operate at a greater load range if it can demonstrate to the agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit.
5. The Permittee shall not operate emission unit P004 if the ambient temperature falls below 30<sup>0</sup>F.

### **III. Monitoring and/or Recordkeeping 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. monthly emissions rate\* for NO<sub>x</sub>, CO, SO<sub>2</sub>, PE, VOC, and individual HAP;
  - e. the annual year to date emissions for SO<sub>2</sub>, PE, and VOC;
  - f. during the first 12 calendar months of operation, the cumulative NO<sub>x</sub>, CO, and individual HAP emissions, in tons; and
  - g. beginning after the first 12 calendar months of operation, the rolling, 12-month NO<sub>x</sub>, CO, and individual HAP emissions, in tons.

\*The permittee shall use the most recent testing data available for each respective pollutant. The monthly emission rate shall be determined by multiplying the mass emission rate of each pollutant by the hours of operation per month plus the total emissions from any start up or shut down period during the month. The individual HAP emissions shall be calculated for emission units P001, P002, P003, and P004 combined.

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 the 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, D4084-82, 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 40 CFR Part 75 as applicable, 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 40 CFR Part 75 as applicable.

5. Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor\* and record NO<sub>x</sub> 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<sub>x</sub> monitoring system, including, but not limited to, parts per million NO<sub>x</sub> on an instantaneous (one-minute) basis, emissions of NO<sub>x</sub> 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<sub>x</sub> 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).

#### **IV. 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 (ie., startup and shutdown periods as defined in Condition B.3. above, malfunctions, etc.), and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> 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 data obtained during the previous calendar quarter.

**PG&E Disbursed Generating Company, LLC**

**PTI Application: 03-13497**

**Issued: To be entered upon final issuance**

**Facility ID: 0387020378**

Emissions Unit ID: P004

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.
7. In lieu of excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P004 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  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049

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."

## **V. Testing Requirements**

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<sub>x</sub> outlet concentration, the lbs/MM Btu limitations for CO, VOC, SO<sub>2</sub>, and PE, and the mass emissions limitations for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and PE. Emission testing shall also be conducted to determine the mass emission rate of formaldehyde.
  - c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO<sub>x</sub>, 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<sub>x</sub> monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and 40 CFR Part 75 as applicable. 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<sub>x</sub> 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<sub>x</sub> emissions shall not exceed 14 ppmvd at 15% Oxygen  
25.08 lbs NO<sub>x</sub>/hr & 28.22 tons NO<sub>x</sub> 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  
4.37 lbs PE/hr & 4.92 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 the actual hours of operation and dividing by 2000 lbs/ton.

- c. Emission Limitation  
0.0057 lb SO<sub>2</sub>/MM Btu heat input  
2.78 lbs SO<sub>2</sub>/hr & 3.13 tons SO<sub>2</sub>/yr

Applicable Compliance Method

Compliance with 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 multiplying the hourly emission rate by the actual hours of operation and dividing by 2000 lbs/ton.

- d. Emission Limitation  
0.0090 lb VOC /MM Btu heat input  
4.37 lbs VOC/hr & 4.92 tons VOC/yr

Applicable Compliance Method

Compliance with 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 multiplying the hourly emission rate by the actual hours of operation and dividing by 2000 lbs/ton.

- e. Emission Limitation  
0.1120 lb CO /MM Btu heat input  
54.55 lbs CO/hr & 61.37 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  
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.

**VI. Miscellaneous Requirements**

NONE

**B. State Only Enforceable Section**

**I. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Mitsubishi 301G natural gas fired combustion turbine with a maximum generating capacity of 31.6 MW controlled with a selective catalytic reduction (SCR) system		See B.III

**2. Additional Terms and Conditions**

2.a NONE

**II. Operational Restrictions**

NONE

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this permit action as evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). This analysis is based upon the combined modeling of "all" air emission sources emitting air toxics that are contained in this PTI. The following summarizes the results of the modeling for the "worst case" pollutant(s) for all sources combined:

Pollutant: Formaldehyde  
 TLV (ug/m3): 273 (Converted from the STEL)  
 Maximum Hourly Emission Rate (lbs/hr): 4.23\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.73

MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid

TLV (ug/m3): 1000

Maximum Hourly Emission Rate (lbs/hr): 2.78\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.43

MAGLC (ug/m3): 23.8

Pollutant: Ammonia

TLV (ug/m3): 17000

Maximum Hourly Emission Rate (lbs/hr): 21.38\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.8

MAGLC (ug/m3): 404.8

\* This was modeled for emissions units P001, P002, P003, and P004 combined.

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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 previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy:”
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the “Air Toxic Policy” for the change.

**IV. Reporting Requirements**

NONE

**V. Testing Requirements**

NONE

**VI. Miscellaneous Requirements**

NONE

**NEW SOURCE REVIEW FORM B**

PTI Number: 03-13497

Facility ID: 0387020378

FACILITY NAME PG&E Dispersed Generating Company, LLC

FACILITY DESCRIPTION 4 Natural Gas fired peaking turbines CITY/TWP Bowling Green

SIC CODE 4911 SCC CODE 2-03-002-02 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION Natural gas fired peaking turbine with a maximum generating capacity of 16.4 MW

DATE INSTALLED 01/2001

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				3.77	4.24
PM <sub>10</sub>	attainment				
Sulfur Dioxide	attainment			1.54	1.73
Organic Compounds				2.42	2.72
Nitrogen Oxides	attainment			13.90	15.64
Carbon Monoxide	attainment			30.22	34.00
Lead	attainment				
Other: Formaldehyde Sulfuric Acid Ammonia				0.20 0.47 3.67	0.23 0.53 4.13

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 Selective Catalytic Reduction (SCR) and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$829,822

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants 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: 03-13497

Facility ID: 0387020378

FACILITY NAME PG&E Dispersed Generating Company, LLC

FACILITY DESCRIPTION 4 Natural Gas fired Peaking Turbines CITY/TWP Bowling Green

SIC CODE 4911 SCC CODE 2-03-002-02 EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION Natural gas fired peaking turbine with a maximum generating capacity of 31.6 MW

DATE INSTALLED 01/2001

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				6.81	7.66
PM <sub>10</sub>	attainment				
Sulfur Dioxide	attainment			2.78	3.13
Organic Compounds				4.37	4.92
Nitrogen Oxides	attainment			25.08	28.22
Carbon Monoxide	attainment			54.55	61.37
Lead	attainment				
Other: Formaldehyde				0.35	0.39
Sulfuric Acid				0.85	0.96
Ammonia				6.62	7.45

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 Selective Catalytic Reduction (SCR) and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$1,467,111

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants 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: 03-13497

Facility ID: 0387020378

FACILITY NAME PG&amp;E Dispersed Generating Company, LLC

FACILITY DESCRIPTION 4 Natural Gas fired Peaking Turbines CITY/TWP Bowling Green

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to [airpti@epa.state.oh.us](mailto:airpti@epa.state.oh.us)

<i>Please fill out the following. If the checkbox does not work, replace it with an 'X'</i>	<u>Electroni</u> <u>c</u>	<u>Additional information File</u> <u>Name Convention (your PTI</u> <u># plus this letter)</u>	<u>Hard</u> <u>Copy</u>	<u>None</u>
Calculations (required)	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other/misc.	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

**SEE PERMIT REVIEW FORM (CALCULATIONS)**

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or  Netting Determination

Permit To Install 03-13497

**A. Source Description**

PG & E Dispersed Generating Company, LLC is proposing to install two more turbines at the peaking station in Bowling Green, Ohio, in Wood County. The facility will generate electricity during periods of high demand to alleviate potential capacity shortfalls and will consist of a total of 97.5 MW (4 natural gas fired electric generators). 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 and Attainment Status**

The facility will emit particulates, sulfur dioxide, organic compounds, nitrogen oxides, carbon monoxide, and hazardous air pollutants (formaldehyde). The pollutants that have a major source potential to emit are nitrogen oxides and carbon monoxide. At 8760 hours, the facility has potential emissions of 335.06 tons per year (tpy) of nitrogen oxides and 727.16 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 86.06 tons of nitrogen oxides per rolling 12-month period and 186.77 tons of carbon monoxide per rolling 12-month period.

**NEW SOURCE REVIEW FORM B**

PTI Number: 03-13497

Facility ID: 0387020378

FACILITY NAME PG&amp;E Dispersed Generating Company, LLC

FACILITY DESCRIPTION 4 Natural Gas fired Peaking Turbines CITY/TWP Bowling Green**D. Conclusion**

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 thresholds. Excursion reports will be required for each emissions unit to ensure compliance.

**PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:**

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	43.86
PE	11.90
SO2	4.86
CO	95.37
VOC	7.64