



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
JACKSON COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 06-06291

DATE: 11/29/2001

Jackson County Generating LLC
Robert Malone
10055 Grogans Mill Rd Parkwood 2 Bldg Ste 150
The Woodlands, TX 77380

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

Patti Smith, Supervisor
Permits Processing Unit
Division of Surface Water

CC: USEPA

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 11/29/2001
Effective Date: 11/29/2001**

FINAL PERMIT TO INSTALL 06-06291

Application Number: 06-06291
APS Premise Number: 0640020072
Permit Fee: **\$16000**
Name of Facility: Jackson County Generating LLC
Person to Contact: Robert Malone
Address: 10055 Grogans Mill Rd Parkwood 2 Bldg Ste 150
The Woodlands, TX 77380

Location of proposed air contaminant source(s) [emissions unit(s)]:

**US Rt 35 and CR 41
Wellston, Ohio**

Description of proposed emissions unit(s):

150 MW simple cycle natural gas fired GE 7FA turbine with dry low NOx Combined PTI with Surface Water.

Description of proposed wastewater disposal system:

Runoff Treatment for Bloomfield Power Generating Facility, Bloomfield Township, Jackson County

The Director has determined that a lowering of water quality in Symmes Creek is necessary. In accordance with OAC 3745-1-05, this decision was reached only after examining a series of technical alternatives, reviewing social and economic issues related to the degradation, and considering all public and appropriate intergovernmental comments. The lowering of water quality is necessary to accommodate important social or economic development in the area in which the water body is located.

The above named entity is hereby granted a Permit to Install for the above described **air emissions unit(s) and wastewater sources** 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

SECTION I
APPLICABLE AIR REQUIREMENTS

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.10 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit 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>
NO _x	562.4
SO ₂	38.8
CO	383.6
VOC	29.9
PM	249.2
formaldehyde	9.8

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

1. The permit to install for these emissions units (P001, P002, P003 and P004) were 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 (OEPA 1997) was applied for each pollutant emitted by this emissions unit using data from the permit to install application. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde

TLV (ug/m3): 273 (converted from STEL)

Maximum Hourly Emission Rate (lbs/hr): 1.38*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.409

MAGLC (ug/m3): 6.49

* For emission units P001, P002, P003 and P004 each.

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, 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.).

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.

2. 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.

Jackson County Generating LLC
PTI Application: 06-06291
Issued: 11/29/2001

Facility ID: 0640020072

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>
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P001 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	OAC Rule 3745-31-05 (A)(3)
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	<u>Applicable Emissions Limitations/Control Measures</u>	
OAC Rule 3745-31-05 (D)	control requirements, see A.I.2.a. 9 ppmvd nitrogen oxides (NO _x) at 15% Oxygen, 0.034 lb NO _x /MM Btu heat input, 66 lbs NO _x /hr & 289 tons NO _x /yr;	operational restrictions, see A.II.1. STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.) NO _x emissions shall not exceed 35.0 tons per year; CO emissions shall not exceed 40.0 tons per year;
40 CFR Part 60, Subpart GG	0.0028 lb sulfur dioxide (SO ₂)/MM Btu heat input, 5.43 lbs SO ₂ /hr & 23.8 tons SO ₂ /year;	SO ₂ emissions shall not exceed 1.0 ton per year;
OAC rule 3745-18-06(F)	0.018 lb carbon monoxide (CO)/MM Btu heat input, 34.9 lbs CO/hr & 153.0 tons CO/yr;	PM emissions shall not exceed 6.4 tons per year;
OAC Rule 3745-17-11(B)(4)	0.0017 lb volatile organic compounds (VOC)/MM Btu heat input, 3.3 lbs VOC/hr & 14.4 tons VOC/year;	VOC emissions shall not exceed 2.2 tons per year.
OAC Rule 3745-103		TOTAL TONS PER YEAR (based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut-down cycles per unit)
40 CFR Part 75	0.018 lb particulate (PM)/MM Btu heat input, 34.9 lbs PM/hr & 153 tons PM/yr;	group emissions limits from P001, P002, P003, and P004 combined of: 383.6 tons CO, 562.4 tons NO _x , 249.2 tons PM* per rolling 12-month period.
	1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr; visible particulate emissions shall not exceed 10 percent opacity as a six-minute average;	(based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut-down cycles per unit) group emissions limits from P001, P002, P003, and P004 combined of: 38.8 tons of SO ₂ , 29.9 tons of VOC, and, 9.8 tons of any individual HAP (see A.I.2.e.), per

Emissions Unit ID: P001

Jackson County Generating LLC

Facility ID: **0640020072**PTI Application: **06-06291****Issued: 11/29/2001**

rolling 12-month period

See A.I.2.c.

See A.I.2.b.

See A.I.2.b.

See A.I.2.d.

See A.I.2.d.

*assume all PM is PM10
emissions**2. Additional Terms and Conditions**

- 2.a** The permittee shall install and maintain dry low NO_x burners on this emissions unit.
- 2.b** The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.c** The emissions limits based on this applicable rule are 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** 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.e** The emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003, and P004 combined, shall not exceed 9.8 tons per year for an individual HAP* and 25 tons per year for any combination of HAPs*, per rolling 12 month period.

*Without the restrictions in this permit, the potential to emit for all HAPs for emissions units P001, P002, P003, and P004 combined is approximately 34.9 tons per year, with approximately 21.8 tons per year being one individual HAP (formaldehyde).

II. Operational Restrictions

1. The maximum 12-month rolling total gas usage for emissions units P001, P002, P003 and P004 combined, shall not exceed 26681 MMscf natural gas, per rolling 12-month period;

To ensure enforceability during the first 12 calendar months following startup*, the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Total Natural Gas Used (MMscf)
1	4867
1-2	9734
1-3	14601
1-4	19468
1-5	24335
1-6,...,12	26681

After the first 12 calendar months following the startup, compliance with the natural gas usage restriction shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions unit P001, P002, P003, or P004 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition A.II.2. and A.II.3. below.

2. As specified in the permittee's PTI application, the maximum design electric output of this unit is 160.0 MW, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.69 million cf/hr with a lower heat value of 1036.89 Btu/cf (1940 MM Btu/hr*), at -4 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up/Shut-down (S/S) shall be defined as when the unit is operating at less than 50 percent of electric load, but under no circumstances shall the total Start-up/Shut-down cycle exceed 60 minutes in duration. Startup and shutdowns shall be limited to 365 cycles (one startup and one shutdown) per unit per year. Each startup and shutdown shall be limited to the following:

<u>Pollutant</u>	<u>Total lbs / hour</u>	<u>Total S/S Tons per Year per unit</u>
NOx	192	35
CO	219	40
SO ₂	5.43	1
PM	34.9	6.4
VOC	12.0	2.2

* The short term emission limits in this permit are based on these maximum heat input rates, and

Emissions Unit ID: P001

Jackson County Generating LLC

Facility ID: **0640020072**PTI Application: **06-06291****Issued: 11/29/2001**

represent the worst case emissions. Variables in determining short term emissions include siting requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

3. With the exception of startup and shutdown, this emission unit shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Southeast District Office (SEDO) 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, and modeling requirements pursuant to Engineering Guide no. 69.
4. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 scf.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit :
 - a. the total gas usage, in MM cf ;
 - b. the monthly emission rate* for Particulate, NO_x, SO₂, CO, and any individual HAP**, in tons;
 - c. during the first 12 calendar months of operation following startup, the cumulative total gas usage, in MM cf ;
 - d. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of total gas usage, in MM cf;
 - e. during the first 12 calendar months of operation following startup, the cumulative emission rate for PM, NO_x, SO₂, CO, and any individual HAP**; and
 - f. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PM, NO_x, SO₂, CO, and any individual HAP**.
 - g. The number of start-ups and shut-downs, and the duration of each start-up and shut-down.

* The permittee shall use the most recent testing results/emissions factor(s) available for each respective pollutant, in conjunction with the fuel used during that period to determine the monthly emissions. The monthly emissions calculated above may include an

adjustment for the average ambient temperature for that month the unit is operating.

** The potential emissions of these emissions units are such that only the individual HAP emissions are necessary to be recorded (see A.I.2.e.).

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), fuel flow (million cu ft), and hours of start-up/shut-down .
4. The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 value 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, SEDO. 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, or upon written approval by the Ohio EPA, SEDO. 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 or as approved by the Ohio EPA.
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_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 40 CFR Part 75 or as approved by the Ohio EPA.

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 continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the

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rolling 12-month total gas usage limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable total gas usage. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per 100 scf limit established in this permit. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
4. 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 occurred.
5. 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 Ohio EPA, SEDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition A.II.2. above, malfunctions, extreme temperature conditions (less than -4° F), 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 Ohio EPA, SEDO 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.

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6. 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 Ohio EPA, SEDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
7. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition A.II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
8. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for this emissions unit in accordance with this permit.
9. 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.

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
 Southeast District Office
 Division of Air Pollution Control Supervisor

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Logan, Ohio 43138**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_x outlet concentrations, the lbs/MM Btu limitations for NO_x* and CO and the mass emissions limitations for NO_x, CO, and formaldehyde.
 - c. The following test method(s) shall be employed, as applicable, to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011; 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, SEDO.
 - d. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, SEDO.
 - 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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, SEDO refusal to accept the results of the emission tests.
 - f. Personnel from the Ohio EPA, SEDO shall be permitted to witness the tests, 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 tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO.

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* 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 40 CFR Part 75. Personnel from the Ohio EPA, SEDO 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 within 30 days after the test is completed. Copies of the test results shall be sent to the Ohio EPA, SEDO 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 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

66 lbs NO_x/hr
 0.034 lb NO_x/MM Btu heat input
 9 ppmvd at 15% Oxygen
 289 tons NO_x/yr ,which includes 35 TPY for startups and shutdowns

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 A.V.1, and the continuous emissions monitoring requirement as described in conditions A.III.5. and A.V.2. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/startup and shutdown values in A.II.2.

- b. Emission Limitation

34.9 lbs CO/hr
 0.018 lb CO /MM Btu heat input
 153.0 tons CO/yr ,which includes 40.0 TPY for startups and shutdowns

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 A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

c. Emission Limitation

1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the lbs/hr emission limitation when firing natural gas shall be demonstrated by the performance testing as described in condition A.V.1. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY.

d. Emission Limitation

3.3 lbs VOC/hr

0.0017 lb VOC /MM Btu heat input

14.4 tons VOC/yr ,which includes 2.2 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1.

Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

e. Emission Limitation

34.9 lbs PM/hr

0.018 lb PM/MM Btu heat input

153 tons PM/yr ,which includes 6.4 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

f. Emission Limitation

5.43 lbs SO₂/hr

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0.0028 lb SO₂/MM Btu heat input

23.8 tons SO₂/yr ,which includes 1.0 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

g. Emission Limitation

Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method

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

h. Emission Limitation

Maximum Facility Total Emission Rates;

562.4 tons of NO_x per rolling 12-month period
 383.6 tons of CO per rolling 12-month period
 38.8 tons of SO₂ per rolling 12-month period
 249.2 tons PM* per rolling 12-month period
 29.9 tons VOC per rolling 12-month period
 9.8 tons of any individual HAP per rolling 12-month period

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition A.III.1. for this emissions unit as well as for emission units P001, P002, P003 and P004.

*assume all PM is PM10 emissions

VI. Miscellaneous Requirements

1. If this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination will be required.
2. Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit

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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 30 days of the start-up of this emissions unit, 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 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.

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>
P001 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None

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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>
P002 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	OAC Rule 3745-31-05 (A)(3)
	OAC rule 3745-31-(13) thru (20)

	<u>Applicable Emissions Limitations/Control Measures</u>	
	control requirements, see A.I.2.a.	STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.)
OAC rule 3745-31-05(D)	9 ppmvd nitrogen oxides (NO _x) at 15% Oxygen, 0.034 lb NO _x /MM Btu heat input, 66 lbs NO _x /hr & 289 tons NO _x /yr;	NO _x emissions shall not exceed 35.0 tons per year;
	0.0028 lb sulfur dioxide (SO ₂)/MM Btu heat input, 5.43 lbs SO ₂ /hr & 23.8 tons SO ₂ /year;	CO emissions shall not exceed 40.0 tons per year;
	0.018 lb carbon monoxide (CO)/MM Btu heat input, 34.9 lbs CO/hr & 153.0 tons CO/yr;	SO ₂ emissions shall not exceed 1.0 ton per year;
40 CFR Part 60, Subpart GG		PM emissions shall not exceed 6.4 tons per year;
OAC rule 3745-18-06(F)	0.0017 lb volatile organic compounds (VOC)/MM Btu heat input, 3.3 lbs VOC/hr & 14.4 tons VOC/year;	VOC emissions shall not exceed 2.2 tons per year.
OAC Rule 3745-17-11(B)(4)	0.018 lb particulate (PM)/MM Btu heat input;	TOTAL TONS PER YEAR (based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut- down cycles per unit)
OAC Rule 3745-103	34.9 lbs PM/hr & 153 tons PM/yr;	group emissions limits from P001, P002, P003, and P004 combined of:
40 CFR Part 75	1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr;	383.6 tons CO, 562.4 tons NO _x , 249.2 tons PM* per rolling 12-month period.
	visible particulate emissions shall not exceed 10 percent opacity as a six-minute average;	(based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut- down cycles per unit)
	operational restrictions, see A.II.1.	group emissions limits from P001, P002, P003, and P004 combined of: 38.8 tons SO ₂ , 29.9 tons VOC, and ,

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9.8 tons of any individual HAP (see A.I.2.e.), per rolling 12-month period.

See A.I.2.c.

See A.I.2.b.

See A.I.2.b.

See A.I.2.d.

See A.I.2.d.

*assume all PM is PM10 emissions

2. Additional Terms and Conditions

- 2.a** The permittee shall install and maintain dry low NO_x burners on this emissions unit.
- 2.b** The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.c** The emissions limits based on this applicable rule are 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** 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.e** The emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003, and P004 combined, shall not exceed 9.8 tons per year for an individual HAP* and 25 tons per year for any combination of HAPs*, per rolling 12 month period.

*Without the restrictions in this permit, the potential to emit for all HAPs for emissions units

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P001, P002, P003, and P004 combined is approximately 34.9 tons per year, with approximately 21.8 tons per year being one individual HAP (formaldehyde).

II. Operational Restrictions

1. The maximum 12-month rolling total gas usage for emissions units P001, P002, P003 and P004 combined, shall not exceed 26681 MMscf natural gas, per rolling 12-month period;

To ensure enforceability during the first 12 calendar months following startup*, the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Total Natural Gas Used (MMscf)
1	4867
1-2	9734
1-3	14601
1-4	19468
1-5	24335
1-6,...,12	26681

After the first 12 calendar months following the startup, compliance with the natural gas usage restriction shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions unit P001, P002, P003, or P004 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition A.II.2. and A.II.3. below.

2. As specified in the permittee's PTI application, the maximum design electric output of this unit is 160.0 MW, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.69 million cf/hr with a lower heat value of 1036.89 Btu/cf (1940 MM Btu/hr*), at -4 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up/Shut-down (S/S) shall be defined as when the unit is operating at less than 50 percent of electric load, but under no circumstances shall the total Start-up/Shut-down cycle exceed 60 minutes in duration. Startup and shutdowns shall be limited to 365 cycles (one startup and one shutdown) per unit per year. Each startup and shutdown shall be limited to the following:

<u>Pollutant</u>	<u>Total lbs / hour</u>	<u>Total S/S Tons per Year per unit</u>
NOx	192	35
CO	219	40
SO ₂	5.43	1
PM	34.9	6.4
VOC	12.0	2.2

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include siting requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

3. With the exception of startup and shutdown, this emission unit shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Southeast District Office (SEDO) 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, and modeling requirements pursuant to Engineering Guide no. 69.
4. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 scf.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit :
 - a. the total gas usage, in MM cf ;
 - b. the monthly emission rate* for Particulate, NO_x, SO₂, CO, and any individual HAP**, in tons;
 - c. during the first 12 calendar months of operation following startup, the cumulative total gas usage, in MM cf ;
 - d. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of total gas usage, in MM cf;
 - e. during the first 12 calendar months of operation following startup, the cumulative emission rate for PM, NO_x, SO₂, CO, and any individual HAP** ; and
 - f. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PM, NO_x, SO₂, CO, and any individual HAP**.
 - g. The number of start-ups and shut-downs, and the duration of each start-up and shut-down.

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* The permittee shall use the most recent testing results/emissions factor(s) available for each respective pollutant, in conjunction with the fuel used during that period to determine the monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

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** The potential emissions of these emissions units are such that only the individual HAP emissions are necessary to be recorded (see A.I.2.e.).

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), fuel flow (million cu ft), and hours of start-up/shut-down .
4. The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 value 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, SEDO. 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, or upon written approval by the Ohio EPA, SEDO. 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 or as approved by the Ohio EPA.
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_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 40 CFR Part 75 or as approved by the Ohio EPA.

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 continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month total gas usage limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable total gas usage. These reports are due by the date

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- described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
 3. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per 100 scf limit established in this permit. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
 4. 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 occurred.
 5. 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 Ohio EPA, SEDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition A.II.2. above, malfunctions, extreme temperature conditions (less than -4° F), 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 Ohio EPA, SEDO 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.

6. 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 Ohio EPA, SEDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
7. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition A.II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
8. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for this emissions unit in accordance with this permit.
9. 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.

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
Southeast District Office

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Jackson County Generating LLC

PTI Application: 06-06201

Issued

Facility ID: 0640020072

Emissions Unit ID: P002

Division of Air Pollution Control Supervisor
2195 Front Street
Logan, Ohio 43138

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_x outlet concentrations, the lbs/MM Btu limitations for NO_x * and CO and the mass emissions limitations for NO_x, CO, and formaldehyde.
 - c. The following test method(s) shall be employed, as applicable, to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011; 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, SEDO.
 - d. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, SEDO.
 - 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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, SEDO refusal to accept the results of the emission tests.
 - f. Personnel from the Ohio EPA, SEDO shall be permitted to witness the tests, 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 tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO.

* 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 40 CFR Part 75. Personnel from the Ohio EPA, SEDO 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 within 30 days after the test is completed. Copies of the test results shall be sent to the Ohio EPA, SEDO 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 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

66 lbs NO_x/hr
0.034 lb NO_x/MM Btu heat input
9 ppmvd at 15% Oxygen
289 tons NO_x/yr ,which includes 35 tpy for startups and shutdowns

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 A.V.1, and the continuous emissions monitoring requirement as described in conditions A.III.5. and A.V.2. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

- b. Emission Limitation

34.9 lbs CO/hr
0.018 lb CO /MM Btu heat input
153.0 tons CO/yr ,which includes 40.0 tpy for startups and shutdowns

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 A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

c. Emission Limitation

1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the lbs/hr emission limitation when firing natural gas shall be demonstrated by the performance testing as described in condition A.V.1. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY.

d. Emission Limitation

3.3 lbs VOC/hr

0.0017 lb VOC /MM Btu heat input

14.4 tons VOC/yr ,which includes 2.2 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1.

Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

e. Emission Limitation

34.9 lbs PM/hr

0.018 lb PM/MM Btu heat input

153 tons PM/yr ,which includes 6.4 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

f. Emission Limitation

5.43 lbs SO₂/hr

0.0028 lb SO₂/MM Btu heat input

23.8 tons SO₂/yr ,which includes 1.0 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

g. Emission Limitation

Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method

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

h. Emission Limitation

Maximum Facility Total Emission Rates;

562.4 tons of NO_x per rolling 12-month period

383.6 tons of CO per rolling 12-month period

38.8 tons of SO₂ per rolling 12-month period

249.2 tons PM* per rolling 12-month period

29.9 tons VOC per rolling 12-month period

9.8 tons of any individual HAP per rolling 12-month period

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition A.III.1. for this emissions unit as well as for emission units P001, P002, P003 and P004.

*assume all PM is PM10 emissions

VI. Miscellaneous Requirements

1. If this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination will 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 30 days of the start-up of this emissions unit, 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 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.

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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>
P002 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None

Emissions Unit ID: P002

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>
P003 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-(13) thru (20)

	<u>Applicable Emissions Limitations/Control Measures</u>	
OAC Rule 3745-31-05 (D)	control requirements, see A.I.2.a. 9 ppmvd nitrogen oxides (NO _x) at 15% Oxygen, 0.034 lb NO _x /MM Btu heat input, 66 lbs NO _x /hr & 289 tons NO _x /yr; 0.0028 lb sulfur dioxide (SO ₂)/MM Btu heat input, 5.43 lbs SO ₂ /hr & 23.8 tons SO ₂ /year; 0.018 lb carbon monoxide (CO)/MM Btu heat input, 34.9 lbs CO/hr & 153.0 tons CO/yr;	STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.) NO _x emissions shall not exceed 35.0 tons per year; CO emissions shall not exceed 40.0 tons per year; SO ₂ emissions shall not exceed 1.0 ton per year; PM emissions shall not exceed 6.4 tons per year; VOC emissions shall not exceed 2.2 tons per year.
40 CFR Part 60, Subpart GG OAC rule 3745-18-06(F)	0.0017 lb volatile organic compounds (VOC)/MM Btu heat input, 3.3 lbs VOC/hr & 14.4 tons VOC/year;	TOTAL TONS PER YEAR (based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut-down cycles per unit) group emissions limits from P001, P002, P003 , and P004 combined of:
OAC Rule 3745-17-11(B)(4) OAC Rule 3745-103	0.018 lb particulate (PM)/MM Btu heat input, 34.9 lbs PM/hr & 153 tons PM/yr;	383.6 tons CO, 562.4 tons NO _x , 249.2 tons PM* and, 9.8 tons of any individual HAP (see A.I.2.e.), per rolling 12-month period
40 CFR Part 75	1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr; visible particulate emissions shall not exceed 10 percent opacity as a six-minute average; operational restrictions, see A.II.1.	(based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut-down cycles per unit) group emissions limits from P001, P002, P003 , and P004 combined of: 38.8 tons SO ₂ , 29.9 tons VOC, and ,

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9.8 tons of any individual
HAP (see
A.I.2.e.), per rolling
12-month period.

See A.I.2.c.

See A.I.2.b.

See A.I.2.b.

See A.I.2.d.

See A.I.2.d.

*assume all PM is PM10
emissions

2. Additional Terms and Conditions

- 2.a** The permittee shall install and maintain dry low NO_x burners on this emissions unit.
- 2.b** The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.c** The emissions limits based on this applicable rule are 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** 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.e** The emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003, and P004 combined, shall not exceed 9.8 tons per year for an individual HAP* and 25 tons per year for any combination of HAPs*, per rolling 12 month period.

*Without the restrictions in this permit, the potential to emit for all HAPs for emissions units P001, P002, P003, and P004 combined is approximately 34.9 tons per year, with approximately 21.8 tons per year being one individual HAP (formaldehyde).

II. Operational Restrictions

1. The maximum 12-month rolling total gas usage for emissions units P001, P002, P003 and P004 combined, shall not exceed 26681 MMscf natural gas, per rolling 12-month period;

To ensure enforceability during the first 12 calendar months following startup*, the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Total Natural Gas Used (MMscf)
1	4867
1-2	9734
1-3	14601
1-4	19468
1-5	24335
1-6, ..., 12	26681

After the first 12 calendar months following the startup, compliance with the natural gas usage restriction shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions unit P001, P002, P003, or P004 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition A.II.2. and A.II.3. below.

2. As specified in the permittee's PTI application, the maximum design electric output of this unit is 160.0 MW, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.69 million cf/hr with a lower heat value of 1036.89 Btu/cf (1940 MM Btu/hr*), at -4 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up/Shut-down (S/S) shall be defined as when the unit is operating at less than 50 percent of electric load, but under no circumstances shall the total Start-up/Shut-down cycle exceed 60 minutes in duration. Startup and shutdowns shall be limited to 365 cycles (one startup and one shutdown) per unit per year. Each startup and shutdown shall be limited to the following:

<u>Pollutant</u>	<u>Total lbs / hour</u>	<u>Total S/S Tons per Year per unit</u>
NOx	192	35
CO	219	40
SO ₂	5.43	1
PM	34.9	6.4

Emissions Unit ID: P003

Jackson County Generating LLC

Facility ID: 0640020072

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Issued: 11/29/2001

VOC	12.0	2.2
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* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include siting requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

3. With the exception of startup and shutdown, this emission unit shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Southeast District Office (SEDO) 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, and modeling requirements pursuant to Engineering Guide no. 69.
4. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 scf.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit :
 - a. the total gas usage, in MM cf ;
 - b. the monthly emission rate* for Particulate, NO_x, SO₂, CO, and any individual HAP**, in tons;
 - c. during the first 12 calendar months of operation following startup, the cumulative total gas usage, in MM cf ;
 - d. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of total gas usage, in MM cf;
 - e. during the first 12 calendar months of operation following startup, the cumulative emission rate for PM, NO_x, SO₂, CO, and any individual HAP**; and
 - f. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PM, NO_x, SO₂, CO, and any individual HAP**.
 - g. The number of start-ups and shut-downs, and the duration of each start-up and shut-down.

* The permittee shall use the most recent testing results/emissions factor(s) available for each respective pollutant, in conjunction with the fuel used during that period to determine the monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

** The potential emissions of these emissions units are such that only the individual HAP emissions are necessary to be recorded (see A.I.2.e.).

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), fuel flow (million cu ft), and hours of start-up/shut-down .
4. The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 value 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, SEDO. 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, or upon written approval by the Ohio EPA, SEDO. 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 or as approved by the Ohio EPA.
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_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 40 CFR Part 75 or as approved by the Ohio EPA.

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 continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month total gas usage limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable total gas usage. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per 100 scf limit established in this permit. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
4. 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 occurred.
5. 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 Ohio EPA, SEDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition A.II.2. above, malfunctions, extreme temperature conditions (less than -4° F), 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 Ohio EPA, SEDO 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.

6. 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 Ohio EPA, SEDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
7. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition A.II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
8. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for this emissions unit in accordance with this permit.
9. 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.

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

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and

Ohio Environmental Protection Agency
Southeast District Office
Division of Air Pollution Control Supervisor
2195 Front Street
Logan, Ohio 43138

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_x outlet concentrations, the lbs/MM Btu limitations for NO_x * and CO and the mass emissions limitations for NO_x, CO, and formaldehyde.
 - c. The following test method(s) shall be employed , as applicable, to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011; 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, SEDO.
 - d. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, SEDO.
 - 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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, SEDO refusal to accept the results of the emission tests.
 - f. Personnel from the Ohio EPA, SEDO shall be permitted to witness the tests, 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 tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO.

* 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 40 CFR Part 75. Personnel from the Ohio EPA, SEDO 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 within 30 days after the test is completed. Copies of the test results shall be sent to the Ohio EPA, SEDO 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 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

66 lbs NO_x/hr

0.034 lb NO_x/MM Btu heat input

9 ppmvd at 15% Oxygen

289 tons NO_x/yr ,which includes 35 tpy for startups and shutdowns

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 A.V.1, and the continuous emissions monitoring requirement as described in conditions A.III.5. and A.V.2. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

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b. Emission Limitation

34.9 lbs CO/hr

0.018 lb CO /MM Btu heat input

153.0 tons CO/yr ,which includes 40.0 tpy for startups and shutdowns

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 A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

c. Emission Limitation

1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the lbs/hr emission limitation when firing natural gas shall be demonstrated by the performance testing as described in condition A.V.1. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY.

d. Emission Limitation

3.3 lbs VOC/hr

0.0017 lb VOC /MM Btu heat input

14.4 tons VOC/yr ,which includes 2.2 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1.

Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

e. Emission Limitation

34.9 lbs PM/hr

0.018 lb PM/MM Btu heat input

153 tons PM/yr ,which includes 6.4 TPY for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

f. Emission Limitation

5.43 lbs SO₂/hr

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0.0028 lb SO₂/MM Btu heat input

23.8 tons SO₂/yr ,which includes 1.0 TPY for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

g. Emission Limitation

Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method

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

h. Emission Limitation

Maximum Facility Total Emission Rates;

562.4 tons of NO_x per rolling 12-month period
 383.6 tons of CO per rolling 12-month period
 38.8 tons of SO₂ per rolling 12-month period
 249.2 tons PM* per rolling 12-month period
 29.9 tons VOC per rolling 12-month period
 9.8 tons of any individual HAP per rolling 12-month period

*assume all PM is PM10 emissions

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition A.III.1. for this emissions unit as well as for emission units P001, P002, P003 and P004.

VI. Miscellaneous Requirements

1. If this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination will be required.
2. Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit

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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 30 days of the start-up of this emissions unit, 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 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.

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 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None

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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>
P004 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	OAC Rule 3745-31-05 (A)(3)
	OAC rule 3745-31-(13) thru (20)

	<u>Applicable Emissions Limitations/Control Measures</u>	
	control requirements, see A.I.2.a.	STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.)
	9 ppmvd nitrogen oxides (NO _x) at 15% Oxygen, 0.034 lb NO _x /MM Btu heat input, 66 lbs NO _x /hr & 289 tons NO _x /yr;	NO _x emissions shall not exceed 35.0 tons per year;
OAC Rule 3745-31-05 (D)	0.0028 lb sulfur dioxide (SO ₂)/MM Btu heat input, 5.43 lbs SO ₂ /hr & 23.8 tons SO ₂ /year;	CO emissions shall not exceed 40.0 tons per year; CO emissions shall not exceed 40.0 tons per year;
	0.018 lb carbon monoxide (CO)/MM Btu heat input, 34.9 lbs CO/hr & 153.0 tons CO/yr;	SO ₂ emissions shall not exceed 1.0 ton per year; PM emissions shall not exceed 6.4 tons per year;
40 CFR Part 60, Subpart GG	0.0017 lb volatile organic compounds (VOC)/MM Btu heat input, 3.3 lbs VOC/hr & 14.4 tons VOC/year;	VOC emissions shall not exceed 2.2 tons per year.
OAC rule 3745-18-06(F)		TOTAL TONS PER YEAR (based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut- down cycles per unit)
OAC Rule 3745-17-11(B)(4)	0.018 lb particulate (PM)/MM Btu heat input, 34.9 lbs PM/hr & 153 tons PM/yr;	group emissions limits from P001, P002, P003, and P004 combined of:
OAC Rule 3745-103		383.6 tons CO, 562.4 tons NO _x , and , 249.2 tons PM* per rolling 12-month period.
40 CFR Part 75	1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr;	
	visible particulate emissions shall not exceed 10 percent opacity as a six-minute average;	(based on 26681 MMscf/yr facility total gas usage including 365 start-up/shut- down cycles per unit) group emissions limits from P001, P002, P003, and P004 combined of:
	operational restrictions, see A.II.1.	38.8 tons SO ₂ ,

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29.9 tons VOC, and ,
9.8 tons of any individual
HAP (see
A.I.2.e.), per rolling
12-month period

See A.I.2.c.

See A.I.2.b.

See A.I.2.b.

See A.I.2.d.

See A.I.2.d.

*assume all PM is PM10
emissions

2. Additional Terms and Conditions

- 2.a** The permittee shall install and maintain dry low NO_x burners on this emissions unit.
- 2.b** The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.c** The emissions limits based on this applicable rule are 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** 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.e** The emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003, and P004 combined, shall not exceed 9.8 tons per year for an individual HAP* and 25 tons per year for any combination of HAPs*, per rolling 12 month period.

*Without the restrictions in this permit, the potential to emit for all HAPs for emissions units P001, P002, P003, and P004 combined is approximately 34.9 tons per year, with approximately 21.8 tons per year being one individual HAP (formaldehyde).

II. Operational Restrictions

1. The maximum 12-month rolling total gas usage for emissions units P001, P002, P003 and P004 combined, shall not exceed 26681 MMscf natural gas, per rolling 12-month period;

To ensure enforceability during the first 12 calendar months following startup*, the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Total Natural Gas Used (MMscf)
1	4867
1-2	9734
1-3	14601
1-4	19468
1-5	24335
1-6,...,12	26681

After the first 12 calendar months following the startup, compliance with the natural gas usage restriction shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions unit P001, P002, P003, or P004 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition A.II.2. and A.II.3. below.

2. As specified in the permittee's PTI application, the maximum design electric output of this unit is 160.0 MW, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.69 million cf/hr with a lower heat value of 1036.89 Btu/cf (1940 MM Btu/hr*), at -4 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up/Shut-down (S/S) shall be defined as when the unit is operating at less than 50 percent of electric load, but under no circumstances shall the total Start-up/Shut-down cycle exceed 60 minutes in duration. Startup and shutdowns shall be limited to 365 cycles (one startup and one shutdown) per unit per year. Each startup and shutdown shall be limited to the following:

<u>Pollutant</u>	<u>Total lbs / hour</u>	<u>Total S/S Tons per Year per unit</u>
NOx	192	35
CO	219	40
SO ₂	5.43	1
PM	34.9	6.4

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VOC	12.0	2.2
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* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include siting requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

3. With the exception of startup and shutdown, this emission unit shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Southeast District Office (SEDO) 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, and modeling requirements pursuant to Engineering Guide no. 69.
4. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 scf.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit :
 - a. the total gas usage, in MM cf ;
 - b. the monthly emission rate* for Particulate, NO_x, SO₂, CO, and any individual HAP**, in tons;
 - c. during the first 12 calendar months of operation following startup, the cumulative total gas usage, in MM cf ;
 - d. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of total gas usage, in MM cf;
 - e. during the first 12 calendar months of operation following startup, the cumulative emission rate for PM, NO_x, SO₂, CO, and any individual HAP**; and
 - f. beginning the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PM, NO_x, SO₂, CO, and any individual HAP**.
 - g. The number of start-ups and shut-downs, and the duration of each start-up and

shut-down.

* The permittee shall use the most recent testing results/emissions factor(s) available for each respective pollutant, in conjunction with the fuel used during that period to determine the monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

** The potential emissions of these emissions units are such that only the individual HAP emissions are necessary to be recorded (see A.I.2.e.).

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), fuel flow (million cu ft), and hours of start-up/shut-down .
4. The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 value 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, SEDO. 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, or upon written approval by the Ohio EPA, SEDO. 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 or as approved by the Ohio EPA.
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_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 40 CFR Part 75 or as approved by the Ohio EPA.

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 continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

IV. Reporting Requirements

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1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling 12-month total gas usage limitations and, for the first 12 calendar months of operation, all exceedances of the maximum allowable total gas usage. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per 100 scf limit established in this permit. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
4. 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 occurred.
5. 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 Ohio EPA, SEDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition A.II.2. above, malfunctions, extreme temperature conditions (less than -4° F), 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 Ohio EPA, SEDO 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

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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.

6. 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 Ohio EPA, SEDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
7. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition A.II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(1).
8. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for this emissions unit in accordance with this permit.
9. 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.

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
Southeast District Office
Division of Air Pollution Control Supervisor
2195 Front Street
Logan, Ohio 43138

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_x outlet concentrations, the lbs/MM Btu limitations for NO_x* and CO and the mass emissions limitations for NO_x, CO, and formaldehyde.
 - c. The following test method(s) shall be employed, as applicable, to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for Formaldehyde, SW-846 Method 0011; 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, SEDO.
 - d. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, SEDO.
 - 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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, SEDO refusal to accept the results of the emission tests.
 - f. Personnel from the Ohio EPA, SEDO shall be permitted to witness the tests, 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 tests shall be signed by the

person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO.

* 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 40 CFR Part 75. Personnel from the Ohio EPA, SEDO 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 within 30 days after the test is completed. Copies of the test results shall be sent to the Ohio EPA, SEDO 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 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

66 lbs NO_x/hr

0.034 lb NO_x/MM Btu heat input

9 ppmvd at 15% Oxygen

289 tons NO_x/yr ,which includes 35 tpy for startups and shutdowns

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 A.V.1, and the continuous emissions monitoring requirement as described in conditions A.III.5. and A.V.2. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

b. Emission Limitation

34.9 lbs CO/hr

0.018 lb CO /MM Btu heat input

153.0 tons CO/yr ,which includes 40.0 tpy for startups and shutdowns

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 A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

c. Emission Limitation

1.38 lb formaldehyde/hr & 6.04 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the lbs/hr emission limitation when firing natural gas shall be demonstrated by the performance testing as described in condition A.V.1. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY.

d. Emission Limitation

3.3 lbs VOC/hr

0.0017 lb VOC /MM Btu heat input

14.4 tons VOC/yr ,which includes 2.2 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1.

Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

e. Emission Limitation

34.9 lbs PM/hr

0.018 lb PM/MM Btu heat input

153 tons PM/yr ,which includes 6.4 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

f. Emission Limitation

5.43 lbs SO₂/hr

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0.0028 lb SO₂/MM Btu heat input

23.8 tons SO₂/yr ,which includes 1.0 tpy for startups and shutdowns

Applicable Compliance Method

If required, compliance with the lbs/hr & lb/MM Btu heat input emission limitations shall be demonstrated by the performance testing as described in condition A.V.1. Compliance with the annual emission limitations shall be determined by multiplying the maximum annual gas usage converted to MMBtu (1036.89 Btu/scf) by the maximum lb/MMBtu emission rate and then converting to TPY. The annual emissions associated with startup and shutdown shall be demonstrated by record keeping required in A.III.1.g. and using the lbs/ startup and shutdown values in A.II.2.

g. Emission Limitation

Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method

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

h. Emission Limitation

Maximum Facility Total Emission Rates;

562.4 tons of NO_x per rolling 12-month period

383.6 tons of CO per rolling 12-month period

38.8 tons of SO₂ per rolling 12-month period

249.2 tons PM* per rolling 12-month period

29.9 tons VOC per rolling 12-month period

9.8 tons of any individual HAP per rolling 12-month period

*assume all PM is PM10 emissions

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition A.III.1. for this emissions unit as well as for emission units P001, P002, P003 and P004.

VI. Miscellaneous Requirements

1. If this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination will be required.
2. Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit

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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 30 days of the start-up of this emissions unit, 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 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.

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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 - 160 MW simple cycle natural gas fired GE 7FA turbine with dry low NO _x burners.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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SECTION II

**APPLICABLE WASTEWATER
REQUIREMENTS**

Jackson County Generating LLC

Facility ID: 0640020072

PTI Application: 06-06291

Issued: 11/29/2001

This permit shall expire if construction has not been initiated by the applicant within eighteen months of the effective date of this permit. By accepting this permit, the applicant acknowledges that this eighteen month period shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the permit applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio EPA.

The director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, examining records, or reports pertaining to the construction, modification, or installation of the above described source of environmental pollutants.

Issuance of this permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations.

Any well, well point, pit, or other device installed for the purpose of lowering the ground water level to facilitate construction of this project shall be properly abandoned in accordance with the provisions of this plan or as directed by the director or his representative.

Any person installing any well, well point, pit or other device used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report form with the Ohio Department of Natural Resources, Division of Water, within 30 days of the well completion in accordance with the Ohio Revised code Section 1521.01 and 1521.05. In addition, any such facility that has a capacity to withdraw waters of the state in an amount greater than 100,000 gallons per day from all sources shall be registered by the owner with the chief of the Division of Water, Ohio Department of Natural Resources, within three months after the facility is completed in accordance with Section 1521.16 of the Ohio Revised Code. For copies of the necessary well log, drilling report, or registration forms, please contact:

Ohio Department of Natural Resources
Fountain Square
Columbus, OH 43224-1387
(614) 265-6717

The proposed wastewater disposal system shall be constructed in strict accordance with the plans and application approved by the director of the Ohio Environmental Protection Agency. There shall be no deviation from these plans without the prior express, written approval of the agency. Any deviations from these plans or the above conditions may lead to such sanctions and penalties as provided for under Ohio law. Approval of this plan and issuance of this permit does not constitute an assurance by the Ohio Environmental Protection Agency 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.

This permit to install applies only to the wastewater treatment works and air contaminant sources listed above. The installation of drinking water supplies or solid waste disposal facilities will require the submittal of a separate application to the director.

No liquids, sludges, or toxic or hazardous substances other than those set forth in the approved permit shall be accepted for disposal without the prior written approval of the Ohio Environmental Protection Agency.

Construction of any wastewater treatment works shall be completed and operation of the facility approved by the Ohio Environmental Protection Agency before sewage or other wastewater is generated by the applicant or is discharged to the wastewater disposal system.

The Southeast District Office of the Ohio Environmental Protection Agency shall be notified in writing as to (a) the construction starting date; (b) the construction completion date; and (c) the date the wastewater disposal system was placed into operation.

The Jackson Generating Company, LLC shall be responsible for proper operation and maintenance of the wastewater disposal system.

Special Conditions: Air Pollution Control Requirements:

Fugitive dust generated by this construction project will be controlled as specified in OAC 3745-17-08(B) which includes, but is not limited to, the following:

No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne. Such reasonably available control measures shall include, but not be limited to, one or more of the following which are appropriate to minimize or eliminate visible emissions or fugitive dust:

1. The use of water or other suitable dust suppression chemicals for the control of fugitive dust from the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
2. The periodic application of asphalt, water, or other suitable dust suppression chemicals on dirt or gravel roads and parking lots, and other surfaces which can cause emissions of fugitive dust;
3. The covering at all times, of open bodied vehicles when transporting materials likely to become airborne;
4. The paving of roadways and the maintaining of roadways in a clean condition; and
5. The prompt removal, in such a manner as to minimize or prevent resuspension, of earth or other materials that has been deposited by trucking or earth moving equipment or erosion by water or other means.

Special Conditions:

1. Prior to construction of any wastewater treatment and disposal systems, three (3) complete sets of

construction plans and specifications of the wastewater treatment and disposal systems must be submitted to the Ohio EPA Southeast District Office.

2. A separate Permit to Install application with three (3) complete sets of detailed plans and specifications, stamped by a professional engineer registered in Ohio, for the sewage treatment and disposal system must be submitted for review and approval prior to construction of any component of the sewage system for sanitary wastewater.
3. All construction of the wastewater treatment and disposal systems must conform to the application and supporting information and documentation submitted to the Ohio EPA.
4. Treatment and disposal of all liquid waste streams including contaminated storm water runoff must be in accordance with the submitted application and supporting documentation.
5. Any exterior chemical or fuel storage tanks shall be provided with secondary containment that is sized for 110% of the tank volume. The containment system shall be adequately designed so the contents does not drain out unless a locked valve is opened.