CONSTRUCTION PERMIT -- PSD APPROVAL
NSPS SOURCE

PERMITTEE
Invenergy Nelson Expansion LLC
Attn: Gordon Gray
1311 Nelson Road
Rock Falls, Illinois 61058

Application No.: 15060042  I.D. No.: 103814AAC
Applicant’s Designation: Simple Cycle Turbines
Date Received: June 29, 2015  Date Issued: Draft 7/1
Subject: Peaking Facility with Two Simple Cycle Combustion Turbines
Location: Nelson Energy Center, 1311 Nelson Road, Rock Falls

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission units and air pollution control equipment consisting of a peaking facility with two simple cycle combustion turbines, as described in the above referenced application. This permit is granted based upon and subject to the findings and conditions that follow.

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the facility, as described in the application, in that the Illinois EPA finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, the federal PSD rules at 40 CFR 52.21, and a Delegation of Authority agreement between the USEPA and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with provisions of 40 CFR 124.19. This approval is based upon the findings that follow. This approval is subject to the following conditions. This approval is also subject to the general requirement that the facility be developed and operated consistent with the specifications and data included in the application and any significant departure from the terms expressed in the application, if not otherwise authorized by this permit, must receive prior written authorization from the Illinois EPA.

If you have any questions on this permit, please call Bob Smet at 217/785-1705.

Raymond E. Pilapil  Date Signed: ______________
Acting Manager, Permit Section
Division of Air Pollution Control

REP:RPS:psj
FINDINGS

1. Invenergy Nelson Expansion LLC has applied for a permit to construct a peaking facility (the affected facility) at the Nelson Energy Center, the existing natural gas-fired power plant east of Rock Falls in Lee County, which is operated by Invenergy Services LLC. The affected facility will have the capacity to produce about 380 MW of electricity for the grid with two simple cycle combustion turbine-generators (the affected turbines). Natural gas will be the primary fuel for the affected turbines, and ultra-low-sulfur diesel will be the backup or secondary fuel. The affected facility will also include a natural gas-fired fuel heater and storage tanks for ultra-low-sulfur diesel and lubricating oil.

2. Lee County is attainment or unclassified for all criteria pollutants.

3a. Under the PSD rules, the affected facility will be a major modification of the existing plant for nitrogen oxides (NOx), particulate matter (PM), particulate matter_{10} (PM_{10}) and particulate matter_{2.5} (PM_{2.5}), with potential emissions of these pollutants that are significant. The affected facility will also be subject to PSD for greenhouse gases (GHG) because the facility’s potential emissions of these pollutants exceed the applicable significant emission rate under the PSD rules. (Refer to Attachment 1 for a summary of the potential emissions of the affected facility.)

b. The affected facility would not be a major modification under the PSD rules for emissions of volatile organic material (VOM), carbon monoxide (CO), sulfur dioxide (SO\textsubscript{2}) or other regulated NSR pollutants. This is because the potential emissions of these other pollutants, as have been addressed by the provisions of this permit, will be below the applicable significant emission rates under the PSD rules.

c. Upon completion of the project, the plant will continue to be a minor source for emissions of hazardous air pollutants (HAPs), i.e., the potential emissions from the plant as limited by this permit, will be less than 10 tons of an individual HAP and 25 tons for total HAPs. Therefore, the affected facility is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), adopted by USEPA under 40 CFR 63 that only apply to major sources of HAPs.

4. After reviewing the materials submitted by Invenergy Nelson II, the Illinois EPA has determined that the affected facility will (i) comply with applicable Board emission standards, (ii) comply with applicable federal emission standards, and (iii) utilize Best Available Control Technology (BACT) on emission units as required by PSD.

Note: The determinations of BACT made by the Illinois EPA for the various emission units at the affected facility are generally contained in the permit conditions for specific emission units that are headed by “Control Technology Determinations (BACT)”.

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5. The air quality analysis submitted by Invenergy Nelson Expansion and reviewed by the Illinois EPA shows that the affected facility will not cause or contribute to violations of the National Ambient Air Quality Standards for nitrogen dioxide (NO₂), ozone (O₃), PM₁₀ or PM₂.₅. The air quality analysis also shows compliance with the Class II allowable increments, as applicable under the PSD rules.

6. The Illinois EPA has determined that the construction permit application for the affected facility complies with all applicable state air pollution regulations and the PSD rules.

7. A copy of the application, the project summary prepared by the Illinois EPA and a draft of this construction permit, were placed in a nearby public repository, and the public was given notice and an opportunity to examine this material and to submit comments on the proposed issuance of this permit.

8. The Illinois EPA has also issued an Acid Rain permit addressing the affected turbines. These turbines would be “affected units” under the Acid Rain Program pursuant to Title IV of the Clean Air Act. As affected units under this program, SO₂ allowances must be held for the actual emissions of SO₂ from the turbines. The turbines are also subject to emissions monitoring requirements for SO₂ and NOx.
PART 1: PERMIT CONDITIONS FOR THE PROJECT

CONDITION 1.1: EFFECT OF PERMIT

a. This permit does not relieve the Permittee of the responsibility to comply with all local, state and federal regulations that are part of the applicable Illinois’ State Implementation Plan, as well as all other applicable federal, state and local requirements.

b. In particular, this permit does not relieve the Permittee from the responsibility to carry out practices during the construction of the affected facility, such as application of water or dust suppressant sprays to roadways, as necessary to minimize fugitive dust and prevent an air pollution nuisance from fugitive dust, as prohibited by 35 IAC 201.141.

CONDITION 1.2: VALIDITY OF PERMIT AND COMMENCEMENT OF CONSTRUCTION

a. This permit shall become invalid if construction is not commenced within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time, pursuant to 40 CFR 52.21(r)(2). The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This condition supersedes Standard Condition 1.

b. For purposes of the above provisions, the definitions of “construction” and “commence” at 40 CFR 52.21 (b)(8) and (9) shall apply, which requires that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (See also the definition of “begin actual construction,” 40 CFR 52.21 (b)(11).)

CONDITION 1.3: EMISSIONS OF THE AFFECTED FACILITY

The emissions of the affected facility shall not exceed the limits in Attachment 1.

CONDITION 1.4: EMISSIONS OF HAZARDOUS AIR POLLUTANTS (HAPS) FROM THE PLANT

a. The emissions of hazardous air pollutants (HAP) from the plant, including both the existing facility and the affected facility, shall not exceed 8.0 tons per year for any individual HAP and 20.0 tons per year for all HAP emitted by the plant.

b. The Permittee shall keep and maintain records for the emissions of HAPs from all emission units at the source (tons/month and tons/year), with supporting documentation and calculations.

CONDITION 1.5: STORAGE TANKS AND ROADWAYS

a. This permit is issued based on negligible emissions of VOM from the storage tanks at the affected facility for ultra-low-sulfur diesel and lubricating oil, i.e., total VOM emissions from these tanks of no more than 0.10 ton/year.
b. The roadways used by vehicles delivering ultra-low-sulfur diesel to the affected facility shall be paved and this pavement shall be maintained in good condition.

CONDITION 1.6: GOOD AIR POLLUTION CONTROL PRACTICES

The Permittee shall operate and maintain all emission units at the affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice, as follows:

a. At all times, including periods of startup, shutdown, malfunction or breakdown, operate as practicable to minimize emissions.

b. Conduct routine inspections and perform appropriate maintenance and repairs to facilitate proper functioning of equipment and minimize or prevent malfunctions and breakdowns.

c. Install, calibrate and maintain required monitoring devices and instrumentation in accordance with good monitoring practices, following the manufacturer's recommended operating and maintenance procedures or such other procedures as otherwise necessary to assure reliable operation of such devices.

CONDITION 1.7: COMPLIANCE WITH EMISSION STANDARDS AND EMISSION LIMITS

a. The emission limits set by this permit, including BACT limits and other permit limits for emissions, apply at all times unless otherwise specified in a particular provision.

b. The emission limits in this permit for particulate matter (PM) address only filterable particulate, as would be measured by USEPA Method 5 or other appropriate USEPA Test Methods. The emissions limits for PM_{10} and PM_{2.5} address both filterable and condensable particulate.

c. When performance or emission testing is conducted, compliance with hourly limits set by this permit shall be determined from the average of the test results, commonly three runs, each at least one hour in duration.

d. During periods of operation other than performance testing, compliance with the emission limits set by this permit shall be determined from operating information for emission units, including information for both the amount of material processed and the operational condition of the units and their control devices, and from appropriate values for emission rates or emission factors that do not understate actual emissions of the units as they were actually operated. For this purpose, for emission units for which performance testing has been conducted, values for emission rates or emissions factors developed from the most recent testing for an emission unit shall be used unless it is determined that this would understate actual emissions of the unit, either as a general matter or for a particular period of operation, in which case alternative rates or factors shall be developed and used consistent with the principles of credible evidence.
e.  

i.  Except as provided below or otherwise specified in a particular provision of this permit, compliance with annual limits established by this permit shall be determined from a rolling total of 12 months of data, i.e., from the sum of the data for the current month and data for the preceding 11 months (12 month total), and shall consider all emissions or operation, including periods of startup, shutdown, and malfunction and breakdown.

ii.  For the first year (12 months) of operation of the affected facility, compliance with annual limits shall be determined from a cumulative total of monthly data, i.e., from the sum of the data for the current month and data for all preceding months since the initial operation of an emission unit at the affected facility.

CONDITION 1.8: RECORDS FOR MONITORING SYSTEMS AND INSTRUMENTATION

a.  The Permittee shall keep records of the data measured by required monitoring systems and instrumentation. Unless otherwise provided in a particular condition of this permit, the following requirements shall apply to such recordkeeping:

i.  For required monitoring systems, data shall be automatically recorded by a central data system, dedicated data logging system, chart recorder or other data recording device. If an electronic data logging system is used, the recorded data shall be the hourly average value of the particular parameter for each hour. During periods when the automatic recording device is out of service, data shall be recorded at least once per hour for periods when the associated emission unit(s) is in service.

ii.  For required instrumentation, the measured data shall be recorded manually at least once per day, unless otherwise specified, with data and time both recorded, for periods when the associated emission unit(s) are in service, provided however that if data from an instrument is recorded automatically, the above provisions for recording of data from monitoring systems shall apply and manual recording of data is not required.

b.  The Permittee shall keep records for the operation, calibration maintenance and repair of required monitoring systems and instrumentation. These operating records shall, at a minimum, identify the date and duration of any time when a required monitoring instrument or device was not in operation, with explanation; the performance of manual quality control and quality assurance procedures for the system; and maintenance and repair activities performed for the system.

c.  The Permittee shall maintain a file containing a copy of the specifications for each required monitoring device or instrument and the recommended operating and maintenance procedures for the device as provided by its manufacturer.
CONDITION 1.9: RECORDS FOR OPACITY MEASUREMENTS

a. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for emission units at the affected facility that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to this permit or a request from the Illinois EPA, or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected operations, the observed opacity, and copies of the raw data sheets for the measurements.

CONDITION 1.10: RETENTION AND AVAILABILITY OF RECORDS

a. Where a condition requires that a file be kept containing certain information, the file shall be updated as needed to keep the information current. Each new version or update shall be marked with the date that it was prepared and shall become effective on that date unless a later “effective date” is also specified.

b. The Permittee shall retain all records and logs required by this permit for at least five years from the date of entry (unless a longer retention period is specified by a particular provision), keep the records at a location at the plant or that is readily accessible from the plant and make records available for inspection and copying by the Illinois EPA or USEPA upon request.

CONDITION 1.11: ADDRESSES FOR THE ILLINOIS EPA

a. Notifications and reports required by this permit shall be sent to the Illinois EPA at the following address unless otherwise indicated:

   Illinois Environmental Protection Agency
   Division of Air Pollution Control
   Compliance and Enforcement Section (#40)
   P.O. Box 19276
   Springfield, Illinois 62794-9276

   Telephone: 217/782-5811  Fax: 217/524-4710

b. One copy of notifications and reports required by this permit that concern emission testing and monitoring shall also be sent electronically to the Illinois EPA, Bureau of Air, Compliance Section, Source Monitoring Unit, using the State of Illinois’s File Transfer Website, unless otherwise instructed by the Illinois EPA:

   http://filet.illinois.gov

   Recipient Email Address: EPA.BOA.SMU@illinois.gov
   File Transfer Email Subject: Invenergy Nelson Expansion, Rock Falls, ID
   103814AAC
Message to Recipient: “A description of submittal, with date”

CONDITION 1.12: AUTHORIZATION TO OPERATE EMISSION UNITS

a. The affected facility may be operated for a period that ends one year after initial startup of an affected turbine, except as further provided below. This period may be extended by Illinois EPA upon request of the Permittee if additional time is needed to complete shakedown or complete initial performance testing for the affected turbines.

b. Upon completion of required performance testing for the affected turbines, the Permittee may continue to operate the affected facility as allowed by Section 39.5(5)(h) of Illinois’ Environmental Protection Act provided that the Permittee has submitted a timely application under the Clean Air Act Permit Program (CAAPP), in accordance with Section 39.5(5)(x) of this Act, to address the affected facility.

c. These conditions supersede Standard Condition 6.

CONDITION 1.13: STANDARD CONDITIONS

Standard conditions for issuance of construction permits, attached hereto, shall apply to this project, unless specifically superseded by other conditions in the permit. (Refer to Attachment 2.)
PART 2: UNIT-SPECIFIC CONDITIONS FOR PARTICULAR EMISSION UNIT(S)

Part 2.1: UNIT-SPECIFIC CONDITIONS FOR THE COMBUSTION TURBINES

2.1.1 Introduction

Two simple-cycle combustion turbines will be used to power electrical generators and supply electricity to the grid. These turbines (the affected turbines) will each have a nominal capacity of 190 MW. As peaking units, the operation of each turbine would be limited to no more than 2550 operating hours in any year. The primary fuel for the turbines will be natural gas. The turbine will have the capability to use ultra-low-sulfur diesel (oil) as a secondary or backup fuel. Evaporative cooling will be installed on the turbines to be able to cool the inlet air during warm weather. NOx emissions when burning natural gas will be controlled by Dry Low-NOx (DLN) combustion technology. NOx emissions when burning oil will be controlled by a combination of Low-NOx combustion technology and water injection.

2.1.2 Control Technology Determination - BACT

a. Each affected turbine shall be operated and maintained with the following features to control or reduce emissions:

i. NOx: Dry low-NOx combustion technology for natural gas and low-NOx combustion technology and water injection for ultra-low-sulfur diesel.

ii. PM, PM$_{10}$ and PM$_{2.5}$: Good combustion practices.

iii. GHG: Turbine-generator design and proper operation.

b. i. The NOx emissions of each affected turbine shall not exceed the following limits, expressed in terms of the concentration of NOx in the exhaust, in parts per million by volume (ppmv) in the exhaust, adjusted to 15 percent oxygen, or the alternative limits expressed in terms of fuel heat input to the turbine, in pounds per million Btu (lb/mmBtu), higher heating value. Compliance with these limits shall be determined using the relevant compliance procedures set forth in the New Source Performance Standards, 40 CFR 60 Subpart KKKK, as addressed in Conditions 2.1.8-1, 2.1.8-2 and 2.1.9.

A. Natural Gas: 9.0 ppmv at 15 percent O$_2$ (equivalent to 0.033 lb/mmBtu, HHV).

B. Ultra-Low-Sulfur Diesel: 42.0 ppmv at 15 percent O$_2$ (equivalent to 0.164 lb/mmBtu, HHV).

ii. Notwithstanding the above, for an affected turbine during commissioning, tuning or an hour that includes a startup or shutdown, the NOx emissions of the affected turbine shall not exceed the applicable limit in Condition 2.1.6(a)(ii).
c.  i. The particulate emissions of each affected turbine shall not exceed the following limits. These limits shall apply as a 3-hour block average, with compliance determined by performance testing in accordance with Condition 2.1.7 and from equipment operation. If test runs are longer than one-hour, the compliance time period during testing shall be the total actual duration of the test runs.

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Limits (lbs/mmBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>0.0038</td>
</tr>
<tr>
<td>Ultra-Low-Sulfur Diesel</td>
<td>0.015</td>
</tr>
</tbody>
</table>

ii. Notwithstanding the above, for an affected turbine during an hour that includes a startup, the particulate emissions of the turbine shall not exceed the applicable limits in Condition 2.1.6(a)(i).

d.  i. The GHG emissions of each affected turbine, as carbon dioxide equivalents (CO\textsubscript{2}e), as an annual average of 12 consecutive operating months, rolled monthly, shall not exceed a limit that is calculated as follows. Compliance with this limit shall be determined using the relevant procedures for quantification of GHG emissions in 40 CFR Part 98 Subpart D and reported annually.

\[
E = \left(\frac{(G_{ng} \times R_{ng}) + (G_{ulsd} \times R_{ulsd})}{G_{ng} + G_{ulsd}}\right) \div \frac{1}{12}
\]

Where

\(E\) = Limit on GHG emissions, as CO\textsubscript{2}e, pounds/MW-hr gross electrical output, annual average, rolled monthly.

\(G_{ng}\) = Gross electrical output of the affected turbine-generator from natural gas, in MW-hr, including output in hours when ultra-low-sulfur diesel provides less than 50 percent of the heat input of the turbine.

\(G_{ulsd}\) = Gross electrical output, of the affected turbine generator from ultra-low-sulfur diesel, in MW-hr, including output in hours when ultra-low-sulfur diesel provides 50 percent or more of the heat input of the turbine.

\(R_{ng}\) = 1367 lb/MW-hr gross output (allowable rate for natural gas).

\(R_{ulsd}\) = 1934 lb/MW-hr gross output (allowable rate for ultra-low-sulfur diesel).

e. For the affected turbines, the Permittee shall implement good air pollution control practices to minimize emissions during startup, including the following:

i. Operation of the affected turbines and associated air pollution control equipment in accordance with written operating procedures that include startup.
ii. Inspection, maintenance and repair of the affected turbines and associated air pollution control equipment in accordance with written maintenance procedures.

2.1.3-1 Applicable Federal Emission Standards

a. i. The affected turbines are subject to the NSPS for Stationary Combustion Turbines, 40 CFR 60 Subpart KKKK, and the General Provisions of the NSPS, 40 CFR Subpart A. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

ii. Pursuant to 40 CFR 60.7(c), 60.4320 and 60.4325 and Table 1 of 40 CFR Subpart KKKK, NOx emissions from each affected turbine, corrected to 15 percent oxygen (O₂) in the exhaust, shall not exceed the following limits except during periods of startup, shutdown and malfunction, as defined by 40 CFR 60.2. If the total heat input of an affected turbine is greater than or equal to 50 percent natural gas, the turbine must meet the corresponding limit for a natural gas-fired turbine when burning that fuel. Similarly, when the affected turbine’s total heat input is greater than 50 percent oil, the turbine must meet the corresponding limit for oil for the duration of the time that that particular fuel is burned.

A. For natural gas, 15 ppm at 15 percent O₂ or 54 ng/J useful output (0.43 lb/MW-hr).

B. For ultra-low-sulfur diesel, 42 ppm at 15 percent O₂ or 160 ng/J useful output (1.3 lb/MW-hr).

iii. Pursuant to 40 CFR 60.4330(a), SO₂ emissions from each affected turbine shall comply with one of the following limits:

A. Emissions shall not exceed 0.90 lbs/MW-hr gross output; or

B. The total potential emissions shall not exceed 0.060 lbs SO₂/mmBtu heat input for each fuel fired in the turbine.

iv. Pursuant to the NSPS, 40 CFR 60.11(d) and 60.4333, at all times, including periods of startup, shutdown and malfunction, the Permittee must operate and maintain the affected turbines, including associated air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

b. The affected turbines are subject to the NSPS for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR 60 Subpart TTTT.
Pursuant to this NSPS, 40 CFR 60.5520(d)(1), the Permittee shall keep purchase records for the fuels burned in the affected turbines.

2.1.3-2 Applicable State Emission Standards

a. The affected turbines are subject to 35 IAC 212.123(a), which provides that no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any subject emission unit, except as allowed by 35 IAC 212.123(b) and 212.124.

b. The affected turbines are subject to 35 IAC 217.706, which provides that no person shall not cause or allow the emissions of NOx into the atmosphere from a subject combustion turbine to exceed 0.25 lbs/mmBtu of actual heat input during each ozone control period, based on a control period average for that unit.

c. The affected turbines are subject to 35 IAC 214.301, which provides that no person shall cause or allows the emission of SO\textsubscript{2} into the atmosphere from a subject emission unit to exceed 2000 ppm.

2.1.3-3 Applicable Programs for Allowance Trading

a. The affected turbines are affected units under the Acid Rain Control Program pursuant to Title IV of the Clean Air Act and are subject to certain requirements pursuant to 40 CFR Parts 72, 73 and 75. As affected units under the Acid Rain Program, the Permittee must hold allowances for the SO\textsubscript{2} emissions of the turbines.

b. The affected turbines qualify as Electrical Generating Units (EGU) for purposes of the Cross State Air Pollution Rule (CSAPR), i.e., 40 CFR Part 97. As such, the Permittee must hold allowances for the NOx and SO\textsubscript{2} emissions of the affected turbines during each calendar year and seasonal control period (NOx only).

2.1.4 Non-Applicability Provisions

a. This permit is issued based on the affected turbines not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR 63 Subpart YYYY. This is because this NESHAP only applies to major sources of HAPs and the plant will continue to not be a major source of HAPs with the construction of the affected facility.

b. Pursuant to 40 CFR 60.4305(b), the affected turbines are not subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subpart GG. This is because the affected turbines will be constructed after February 18, 2005, the applicability date of 40 CFR 60 Subpart KKKK.

c. Pursuant to 40 CFR 60.5520(d)(1) and 60.5525, this permit is issued based on the affected turbines not being subject to an
emission standard under the NSPS for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR 60 Subpart TTTT. This is because the affected turbines, as peaking units, would only potentially be subject to a heat input based limit in Table 2 of 40 CFR 60 Subpart TTTT if natural gas was not their primary fuel.

d. This permit is issued based on the affected turbines not being subject to 35 IAC 212.321 because this rule cannot reasonably be applied to combustion turbines.

2.1.5 Design and Operational Limits

a. i. The affected turbines shall only be fired with natural gas and ultra-low sulfur diesel.

ii. The sulfur content of the ultra-low-sulfur diesel shall not exceed 15 ppm by weight.

iii. Ultra-low-sulfur diesel shall only be fired in the affected turbines for purposes of operational or emissions testing or when the supply of natural gas is constricted, restricted or curtailed.

b. The rated output of each affected turbine shall not exceed 190 MWe, at ISO conditions.

c. The annual usage of fuel by the affected turbines, combined, shall not exceed the following limits:

i. Total: 9,770,000 mmBtu/year.

ii. Ultra-low-sulfur diesel: 1,800,000 mmBtu/year.

d. The operation of each affected turbine, determined as the time when fuel is flowing to the combustors in the turbines, shall not exceed the following limits:

i. Total operation: 2550 hours/year.

ii. Operation on ultra-low-sulfur diesel: 400 hours/year.

e. The number of startups of the affected turbines, combined, shall not exceed the following limits. For this purpose, if a turbine trips during a startup, a subsequent startup of the turbine that begins within one hour after the trip occurred shall not be counted.

i. Total startups: 360/year.

ii. Startups on ultra-low-sulfur diesel: 60/year

f. i. Tuning of the affected turbines shall only be conducted while a turbine is firing natural gas.
ii. Each affected turbine shall not be tuned for more than 25 hours/year.

iii. For this purpose, tuning is operation of a turbine for the purpose of calibrating operational instrumentation and adjusting operational programming rather than in response to a demand for electricity.

2.1.6 Emission Limits

a. The short-term emissions of each affected turbine shall not exceed the following limits:

i. Except as provided by Condition 2.16(a)(ii) and (iii), the short-term emissions of each affected turbine shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Limits for Each Fuel (Pounds/Hour)</th>
<th>Ultra-Low-Sulfur Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>64.0</td>
<td>349.0</td>
</tr>
<tr>
<td>CO</td>
<td>32.3</td>
<td>72.4</td>
</tr>
<tr>
<td>PM</td>
<td>7.5</td>
<td>32.2</td>
</tr>
<tr>
<td>PM$<em>{10}$/PM$</em>{2.5}$</td>
<td>10.0</td>
<td>42.9</td>
</tr>
<tr>
<td>VOM</td>
<td>3.0</td>
<td>7.0</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>2.73</td>
<td>3.42</td>
</tr>
<tr>
<td>Individual HAP</td>
<td>0.24</td>
<td>1.66</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>0.88</td>
<td>2.71</td>
</tr>
</tbody>
</table>

ii. A. The short-term emissions of NOx, CO and VOM of each affected turbine during startup and shutdown shall not exceed the following limits. Compliance with the limits in pounds/hour shall be determined for each hour that includes a startup or shutdown of a turbine:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Form of Limit</th>
<th>Limits for Each Fuel (Pounds/hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>Pounds/hour</td>
<td>110.0</td>
</tr>
<tr>
<td></td>
<td>Pounds/cycle</td>
<td>275.0</td>
</tr>
<tr>
<td>CO</td>
<td>Pounds/hour</td>
<td>300.0</td>
</tr>
<tr>
<td></td>
<td>Pounds/cycle</td>
<td>260.3</td>
</tr>
<tr>
<td>VOM</td>
<td>Pounds/cycle</td>
<td>20.8</td>
</tr>
</tbody>
</table>

B. Compliance with the limits in pounds/hour shall be determined for each hour that includes a startup or shutdown of a turbine. For this purpose, a startup begin when the flow of fuel to a turbine starts and ends, for natural gas, 10 minutes after transition to dry low NOx combustion, for ultra-low-sulfur diesel, 10 minutes after beginning water injection, or if
earlier, 40 minutes after first firing fuel in the turbine or when the startup is terminated. A shutdown begins when the firing rate on a turbine falls below the firing rate necessary for dry low NOx combustion or, for ultra-low-sulfur diesel, the firing rate necessary for water injection.

C. Compliance with the limits in pounds/cycle shall be determined for the combination of the startup of a turbine and the subsequent shutdown of the turbine, not considering the intervening operation of the turbine between startup and shutdown.

iii. During commissioning and during tuning of a turbine on natural gas, NOx emissions shall not exceed 106.7 pounds/hour and 15 ppmvd at 15 percent O2.

iv. For the purpose of Conditions 2.1.6(a)(i), (ii) and (iii), if an affected turbine fires both natural gas and ultra-low-sulfur diesel during an hour, compliance with the hourly emission limits shall be determined as follows

A. On a weighted basis using the percentage of the heat input provided by natural gas and by ultra-low-sulfur diesel. For example, for purpose of Condition 2.1.6(a)(i), if during an hour, each fuel provides half the heat input to the turbine, the limit for NOx would be 206.5 lb/hr \([0.5 \times 64.0 \text{ lb/hr} + (0.5 \times 349.0 \text{ lb/hr}) = 206.5 \text{ lb/hr}].\)

B. Notwithstanding the above, if both natural and oil are both fired during an hour that includes a startup, the limits for oil shall apply.

b. As a general matter, compliance with the limits for NOx and CO emissions in Condition 2.1.6(a) and (b) shall be determined by testing and monitoring in accordance with the NSPS. Compliance with the emission limits in these conditions for other pollutants shall be determined in order of priority, using appropriate emission factors reflecting actual operation of the turbines, which shall be derived from emission testing conducted in accordance with Condition 2.1.7-1, manufacturer’s data, or standard emission factors.

c. The annual emissions of the affected turbines, combined, shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Limits (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>277.0</td>
</tr>
<tr>
<td>CO</td>
<td>96.2</td>
</tr>
<tr>
<td>VOM</td>
<td>13.0</td>
</tr>
<tr>
<td>PM</td>
<td>28.6</td>
</tr>
</tbody>
</table>
2.1.7-1 Requirements for Performance Testing

a. Pursuant to the NSPS, 40 CFR 60.8, the Permittee shall have initial performance tests conducted for the affected turbines for emissions of NOx and SO2 in accordance with 40 CFR 60.8 using applicable methods and procedures specified by 40 CFR 60.4400 and 60.4415.

b. The Permittee shall have tests conducted for one of the turbines as follows at its expense by an approved testing service. These tests shall be conducted while the subject turbine is operating in its maximum operating range and other representative operating conditions.

i. This testing shall be conducted by the following dates:

   A. Initial testing shall be conducted within 180 days of the initial startup of an affected turbine,

   B. Thereafter, testing of affected turbine shall be conducted following a written request by the Illinois EPA, with such testing conducted either within 60 days, the date that a turbine next operates or on the date agreed to by the Illinois EPA, whichever is later.

ii. Testing shall be conducted for emissions of VOM, PM, PM10/PM2.5 and HAPs (formaldehyde), with separate testing conducted for firing of natural gas and ultra-low-sulfur diesel. In addition, if visible emissions are typically present from an affected turbine when firing a fuel, the Permittee shall also conduct observations for opacity by Method 9 during the emission tests for firing that fuel.

iii. For purposes of this testing, the following methods and procedures shall be used unless other methods adopted by or being developed by USEPA are specified or approved by the Illinois EPA.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOM</td>
<td>Method 18, 25A or 320</td>
</tr>
<tr>
<td>NOx</td>
<td>Method 7E</td>
</tr>
<tr>
<td>PM (filterable)</td>
<td>Method 5</td>
</tr>
<tr>
<td>PM (condensable)</td>
<td>Method 202</td>
</tr>
<tr>
<td>PM10/PM2.5 (filterable)</td>
<td>Method 201A</td>
</tr>
<tr>
<td>N2O and CH4</td>
<td>Method 320</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>Method 320</td>
</tr>
</tbody>
</table>
iv. Test plans, test notifications, and test reports shall be submitted to the Illinois EPA Air Compliance Section in accordance with Conditions 3.1(a), (b) and (c). In addition to other required information, if test runs that are longer than one-hour in duration are planned, the expected duration of the runs and the reason for extended runs shall be explained.

2.1.7-2 Opacity Observations Requirements

   a. The Permittee shall have the opacity of the emissions from each affected turbine during representative operating conditions determined by a qualified observer in accordance with USEPA Method 9, as further specified below.

      i. Within 180 days of initially operating the affected turbine, the Permittee shall have opacity observations conducted for both firing of natural gas and of ultra-low-sulfur diesel.

      ii. At least every five year calendar years thereafter, the Permittee shall have opacity observations conducted for the turbine for both firing of natural gas and of ultra-low-sulfur diesel, provided, however, that such observations shall not be required for a fuel if visible emissions are not present in the exhaust from the turbine as determined by the Permittee with observations by USEPA Method 22. For this purpose, observations for visible emissions shall be conducted in the calendar year and in each of the four preceding calendar years, except that observations are not required in a particular calendar year for firing ultra-low-sulfur diesel if it was not fired in that year.

      iii. Upon written request by the Illinois EPA, observations of the opacity of an affected turbine shall be conducted within 60 calendar days of the request, on the date that the turbine next operates for more than 30 minutes, or by the date agreed upon by the Illinois EPA, whichever is latest.

   b. The duration of required observations shall be as follows;

      i. The duration of required observations of opacity shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the initial 12 minutes of observation (two six-minute averages) are both less than 5.0 percent.

      ii. The duration of required observations for visible emissions shall be at least 15 minutes.

   c. i. For the observations of opacity required by Condition 2.1.7-2(a), the Permittee shall submit a written report within 30 days of the date of observation, which report shall include the following information:
A. Date and time of observation.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation conditions.

E. Description of the fuel being fired and other operating conditions of the affected turbine.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

ii. If observations of opacity were not conducted pursuant to Condition 2.1.7-2(a)(ii) because visible emissions were not present in the exhaust of the turbine, a report shall be submitted following the final observations for visible emissions in the fifth calendar year and, for each of the five required annual observations for visible emissions, include the name(s) of the observer(s) and the information specified in Condition 2.1.7-2(c)(i) (A), (D), (E) and (H).

2.1.8-1 Emission Monitoring Requirements

a. i. For each affected turbine, the Permittee shall calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for NOx emissions in accordance with the applicable monitoring requirements of 40 CFR 60.4340(b)(1), the federal Acid Rain Program, 40 CFR Part 75, and the Cross State Air Pollution Rule, 40 CFR 96 Subpart HHH.

ii. For the affected turbines, this monitoring for NOx emissions conducted above shall also be used to determine compliance with the limits for NOx emissions in Condition 2.1.6(a) and (b), except that the provisions for substitution of missing data need not be used.

b. For each affected turbine, the Permittee shall calibrate, maintain, and operate a CEMS for CO emissions in accordance with the relevant monitoring requirements of 40 CFR 60.13. Quality assurance for these CEMS shall be in accordance with to 40 CFR Part 75, Appendix B, Quality Assurance and Control Procedures.

2.1.8-2 Fuel Sampling and Analysis Requirements

a. The Permittee shall determine the total sulfur content of the fuels combusted in the affected turbines in accordance with 40 CFR 60.4360, 60.4365 and 60.4370.
b. The Permittee shall keep records for this sampling and analysis activity, including both collected data and documentation for the sampling and analysis activities.

2.1.9 Recordkeeping Requirements

a. i. For the affected turbines, the Permittee shall comply with the applicable recordkeeping requirements of the NSPS, 40 CFR 60 Subparts A, KKKK and TTTT.

ii. For the affected turbines, the Permittee shall comply with the applicable recordkeeping requirements of 35 IAC 217.712.

b. For the affected turbines, the Permittee shall maintain a file or other records for the affected turbines that include:

i. The manufacturer’s data for the affected turbines, including emissions guarantees, horsepower or rated heat input capacity (mmBtu/hour), and operating and maintenance procedures suggested by the manufacturer.

ii. The Permittee’s established startup procedures for the affected turbines.

c. The Permittee shall maintain the following records for the affected turbines:

i. An operating log that includes the information specified by Condition 3.2(a), and identifies the operating mode for each hour of operation (i.e., cold weather, or very cold weather).

ii. An inspection, maintenance, and repair log that includes the information specified by Condition 3.2(b).

d. The Permittee shall maintain the records for the following information for each affected turbine:

i. The following information related to fuel usage (mmBtu/month and mmBtu/year):

A. Usage of natural gas.
B. Usage of ultra-low-sulfur diesel (oil).
C. Total fuel usage.

ii. The following information related to operating hours (hours/month and hours/year):

A. Total number of hours of operation.
B. Total number of hours of operation when firing oil.
iii. The following information related to startups (startups/month and startups/year):
   A. Total number of startups.
   B. Total number of startups on oil.

iv. The following information related to tuning:
   A. Total number of minutes per tuning event.
   B. The total duration of tuning (hours/month and hours/year).

v. The following information related to electrical output from the associated generator (MW-hr/month and MW-hr/year):
   A. Output from firing natural gas in the turbine.
   B. Output from firing oil in the turbine.
   C. Total output.

e. The Permittee shall maintain records of the following information for the emissions of the affected turbines:

i. The emissions of NOx and CO of the affected turbines based on the CEMS (tons/month and tons/year).

ii. The CO₂ emissions of the affected turbines based on the operational monitoring for fuel consumption (tons/month and tons/year), with supporting calculations.

iii. For emissions of NOx, PM, PM₁₀/PM₂.₅, SO₂, VOM, N₂O, CH₄ and HAPs, a file containing the maximum hourly emission rates and the emission rates used by the Permittee to determine the emissions of the affected turbines for natural gas and ultra-low-sulfur diesel, with supporting documentation.

iv. The emissions of PM, PM₁₀/PM₂.₅, SO₂, VOM, and HAPs of the affected turbines (tons/month and tons/year), with supporting documentation and calculations.

v. For each affected turbine for GHG emissions:
   A. The GHG emissions of the turbine, as CO₂ₑ, considering emissions of CO₂, N₂O and CH₄ (tons/month and tons/year), with supporting documentation and calculations.

   B. The GHG emissions of the each affected turbine, as CO₂ₑ, in lbs/MW-hr, annual average.
2.1.10 Notification and Reporting Requirements

a. For the affected turbines, the Permittee shall comply with the applicable notification and reporting requirements of the NSPS, 40 CFR 60 Subparts A and KKKK.

b. For the affected turbines, the Permittee shall comply with the applicable reporting requirements of 35 IAC 217.712.
PART 2.2: UNIT-SPECIFIC CONDITIONS FOR THE FUEL HEATER

2.2.1 Description

The fuel heater (the affected fuel heater) will burn natural gas. This heater will be used to indirectly heat natural gas fuel for the affected turbines. This is necessary to counteract the cooling that occurs when the pressure of the gas is reduced to the level needed for the fuel supply to the combustion turbines.

2.2.2 Control Technology Determination (BACT)

a. For NOx, the affected fuel heater shall be designed and operated to comply with a limit of 0.033 lb/mmBtu, on a 3-hour average.

b. The emissions of PM and PM_{10}/PM_{2.5} from the affected fuel heater shall each not exceed 0.105 pounds/hour, on a 3-hour average.

c. The GHG emissions of the affected fuel heater, as CO₂e, shall not exceed 3,650 tons/year.

2.2.3-1 Applicable Federal Emission Standards

a. The affected unit is subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc, and applicable requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.

b. Pursuant to the NSPS, 40 CFR 60.11(d), at all times the Permittee shall, to the extent practicable, maintain and operate the affected fuel heater in a manner consistent with good air pollution control practices for minimizing emissions.

2.2.3-2 Applicable State Emission Standards

a. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from the affected fuel heater shall not exceed 30 percent, except as provided by 35 IAC 212.123(b).

b. The affected fuel heater is subject to 35 IAC 216.121, which provides that no person shall cause or allow the emission of CO into the atmosphere from any subject fuel combustion emission unit to exceed 200 ppm, corrected to 50 percent excess air.

2.2.4 Non-applicability Provisions

a. This permit is based on the affected fuel heater not being subject to the federal NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD (the Boiler NESHAP). This is because the plant is not a major source for emissions of HAPs.

b. This permit is based on the affected fuel heater not being subject to the NESHAP for Industrial, Commercial, and
Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ, because the NESHAP does not apply to process heaters.

2.2.5 Operational Requirements

a. Natural gas shall be the only fuel fired in the affected fuel heater.

b. The rated heat input capacity of the affected fuel heater shall not exceed 15.0 mmBtu/hour.

c. The usage of natural gas in the affected fuel heater shall not exceed 30.4 million scf/year.

2.2.6 Emissions

a. The emissions from the affected unit shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>0.40</td>
</tr>
<tr>
<td>CO</td>
<td>0.44</td>
</tr>
</tbody>
</table>

b. This permit is issued based on minimal emissions of PM, PM_{10}/PM_{2.5}, VOM, SO_{2} and HAPs from the affected unit, i.e., the total emissions of PM/PM_{10}/PM_{2.5}, VOM, HAP and SO_{2} from the affected fuel heater each being no more than 0.1 tons/year.

2.2.7 Recordkeeping Requirements

a. The Permittee shall maintain the following records for the affected fuel heater:

i. A file containing the following maximum design heat input capacity (mmBtu/hour), with supporting documentation, if this information is not provided by the nameplate attached to the unit.

b. An inspection, maintenance, repair and operating log or other records for this unit that, at a minimum, shall include the following information:

i. Information for each startup and shutdown, including date, time and duration, as required by 40 CFR 60.7(b).

ii. Information for any incident in which the operation of this unit continued during malfunction or breakdown, as required by 40 CFR 60.7(b). These records shall include date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.
iii. An inspection, maintenance, and repair log with dates and the nature of such activities for this unit.

iv. Records for the amount of fuel combusted on a calendar month basis, pursuant to 40 CFR 60.48c(g).

c. The Permittee shall keep records for the amount of natural gas fired by the affected fuel heater (million scf/month and million scf/year).

d. The Permittee shall keep the following records related to emissions of NOx and CO of the affected unit (tons/month and tons/year), with supporting calculations:

i. A file containing a determination of the maximum emission rates of each pollutant with supporting documentation (lb/mmBtu and lb/hour).

ii. Records of actual emissions of each pollutant (tons/month and tons/year), with supporting calculations.

2.2.8 Notification and Reporting Requirements

a. Pursuant to 40 CFR 60.7(a)(3) and 60.48c(a), the Permittee shall furnish the Illinois EPA with written notification as follows with respect to commencement of construction and operation of the affected fuel heater, which notification shall be accompanied by the following information:

i. The design heat input capacity of the unit and identification of the fuels to be combusted in the affected unit, pursuant to 40 CFR 60.48c(a)(1).

ii. The annual capacity factor at which the Permittee anticipates operating the affected unit based on fuel fired, pursuant to 40 CFR 60.48c(a)(3).

b. For the affected fuel heater, the Permittee shall notify the Illinois EPA, of deviations from the permit requirements, in accordance with Condition 3.4.
PART 3: GENERAL PERMIT CONDITIONS

CONDITION 3.1: GENERAL REQUIREMENTS FOR EMISSION TESTING

a. i. Except as provided below, by Condition 3.1(a)(ii), at least 60 days prior to the actual date of emission testing required by this permit, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include at a minimum:

A. The person(s) who will be performing sampling and analysis and their experience with similar tests.

B. The specific conditions, e.g., operating rate and control device operating conditions, under which testing shall be performed including a discussion of why these conditions will be representative and the means by which the operating parameters will be determined.

C. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations.

D. The test method(s) that will be used, with the specific analysis method if the method can be used with different analysis methods.

ii. As provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emissions testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee’s notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).

b. i. The Permittee shall notify the Illinois EPA prior to performing emissions testing required by this permit to enable the Illinois EPA to observe the tests. Notification for the expected date of testing shall be submitted a minimum of 30 days prior to the expected date, and identify the testing that will be performed. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of testing. Notwithstanding 40 CFR 60.8(d), the Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA’s ability to observe testing.

ii. This notification shall also identify the parties that will be performing testing and the set or sets of operating conditions under which testing will be performed.

c. Three copies of the Final Reports for emission tests shall be forwarded to the Illinois EPA within 30 days after the test results are compiled and finalized but not later than 90 days after the date
of testing. At a minimum, the Final Report for testing shall contain the following.

i. General information

ii. A tabular summary of results which includes:
   - Process rates (e.g., fuel rates, firing rate and output in MW-hr).
   - Measured emission rates for different pollutants tested
   - Emission factor, calculated using the average test results in the terms of the applicable limits, for example, in units of lbs pollutant emitted per mmBtu and MW-hr.
   - Compliance demonstrated - Yes/No

iii. Description of test method(s) and procedures, including a description of sampling points, sampling train, analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:
   - Pertinent process information (e.g., usage of fuel and composition.)
   - Control equipment information (i.e., monitored data and other relevant operating parameters during testing).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.

vi. The results of all quality control evaluations, with a copy of all qualified data.

d. Records of the initial performance test, including operating parameters monitored during the test, shall be kept for the life of the unit. Records of subsequent tests shall be maintained for a minimum of five years.

CONDITION 3.2: GENERAL REQUIREMENTS FOR “LOGS” OR SIMILAR RECORDS

a. Operating logs or other similar records required by this permit shall, at a minimum, include the following information related to the emission units and associated control system:

i. Information identifying periods when an emission unit or group of related emission units was not in service.

ii. For periods when a unit or group of related units is in service and operating normally, relevant process and control system information to generally confirm normal operation.
iii. For periods when a unit or group of related units is in service and is not operating normally, identification of each such period, with detailed information describing the operation of the unit(s), the potential consequences for additional emissions from the unit(s), the potential of any excess emissions from the affected unit(s), the actions taken to restore normal operation, and any actions taken to prevent similar events in the future.

iv. Other information as may be appropriate to show that the emission unit or group of related emission units is operated in accordance with good air pollution control practices.

b. Inspection, maintenance and repair logs or other similar information required by this permit shall, at a minimum, include the following information related to the emission units and associated control system:

i. Identification of equipment, with date, time, responsible employee and type of activity.

ii. For inspections, a description of the inspection, findings, and any recommended actions, with reason.

iii. For maintenance and repair activity, a description of actions taken, reason for action (e.g., preventative measure or corrective action as a result of inspection), probable cause for requiring maintenance or repair if not routine or preventative, and the condition of equipment following completion of the activity.

iv. Other information as may be appropriate to show that the emission unit or group of related emission units is maintained in accordance with good air pollution control practices, including prompt repair of defects that interfere with effective control of emissions.

c. The logs required by this permit may be kept in manual or electronic form, and may be part of a larger information database maintained by the Permittee provided that the information required to be kept in a log is readily accessible.

CONDITION 3.3: GENERAL REQUIREMENTS FOR RECORDKEEPING FOR DEVIATIONS

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, records for deviations from applicable requirements shall include at least the following information: the date, time and estimated duration of the deviation; a description of the deviation; the manner in which the deviation was identified, if not readily apparent; the probable cause for deviation, if known, including a description of any equipment malfunction or breakdown associated with the deviation; information on the magnitude of the deviation, including actual emissions or performance in terms of the applicable standard if measured or readily estimated; confirmation that standard procedures were followed or a description of any...
event-specific corrective actions taken; and a description of any preventative measures taken to prevent future occurrences, if appropriate.

CONDITION 3.4: GENERAL REQUIREMENTS FOR REPORTING OF DEVIATIONS

a. The Permittee shall include the following information in records and reports for deviations:

i. Identity of the deviation, with date, time, duration and description.

ii. Describe the effect of the deviation on compliance, with an estimate of the excess emissions that accompanied the deviation, if any.

iii. Describe the probable cause of the deviation and any corrective actions or preventive measures taken.

b. i. Unless otherwise specified in a particular condition of this permit, if deviation(s) from requirements of this permit occurs during a reporting period, a compliance report shall be submitted no later than 45 days after the end of the reporting period. This report shall also provide a listing of all deviations for which immediate or 30-day reporting was required, but need not include copies of the previously submitted information.

ii. If there are no deviations during a reporting period, the Permittee shall still submit a compliance report, which report shall state that no deviations occurred during the reporting period.

c. i. For the purpose of determining whether a deviation must be reported prior to a periodic compliance report, a deviation shall be considered to continue even if operation of an emission unit is interrupted if the deviation is still present when operation of the unit is resumed.

ii. When this permit requires immediate notification, such notification shall be provided by telephone and followed by facsimile or e-mail transmittal of a narrative report.

d. Upon issuance of a CAAPP permit for the affected facility, the provisions of the CAAPP permit with respect to reporting of deviations will supersede the requirements of this permit for reporting of deviations.
ATTACHMENT 1:

**Summary of Permitted Annual Emissions of the Affected Facility (Tons/Year)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Turbines</th>
<th>Fuel Heater</th>
<th>Storage Tanks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>277.0</td>
<td>0.4</td>
<td>---</td>
<td>277.5</td>
</tr>
<tr>
<td>CO</td>
<td>96.2</td>
<td>0.5</td>
<td>---</td>
<td>96.7</td>
</tr>
<tr>
<td>VOM</td>
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</tr>
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<td>SO₂</td>
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<td>PM₁₀/PM₂.₅</td>
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<td>---</td>
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<td>Individual HAP</td>
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<td>0.8</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>3.0</td>
<td>0.1</td>
<td>---</td>
<td>3.1</td>
</tr>
</tbody>
</table>
ATTACHMENT 2: STANDARD PERMIT CONDITIONS

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Illinois Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, has been submitted to the Illinois EPA and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:
   a. To enter the Permittee’s property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;
   b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;
   c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;
   d. To obtain and remove samples of any discharge or emissions of pollutants; and
   e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
5. The issuance of this permit:

   a. Shall not be considered as in any manner affecting the title of
      the premises upon which the permitted facilities are to be
      located;

   b. Does not release the Permittee from any liability for damage to
      person or property caused by or resulting from the construction,
      maintenance, or operation of the proposed facilities;

   c. Does not release the Permittee from compliance with other
      applicable statutes and regulations of the United States, of the
      State of Illinois, or with applicable local laws, ordinances and
      regulations;

   d. Does not take into consideration or attest to the structural
      stability of any units or parts of the project; and

   e. In no manner implies or suggests that the Illinois EPA (or its
      officers, agents or employees) assumes any liability, directly
      or indirectly, for any loss due to damage, installation,
      maintenance, or operation of the proposed equipment or facility.

6a. Unless a joint construction/operation permit has been issued, a
    permit for operation shall be obtained from the Illinois EPA before
    the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by
   a special permit condition, the equipment covered under this permit
   may be operated for a period not to exceed thirty (30) days.

7. The Illinois EPA may file a complaint with the Board for
   modification, suspension or revocation of a permit,

   a. Upon discovery that the permit application contained
      misrepresentations, misinformation or false statement or that
      all relevant facts were not disclosed; or

   b. Upon finding that any standard or special conditions have been
      violated; or

   c. Upon any violations of the Environmental Protection Act or any
      regulation effective thereunder as a result of the construction
      or development authorized by this permit.