217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Exelon Generation Co., L.L.C.
Attn: Terry L. Steinert, Sr., Environmental Analyst
4300 Winfield Road
Warrenville, Illinois 60555

Application No.: 73020832 I.D. No.: 161807AAB
Applicant's Designation: QCGENERAL Date Received: October 12, 2001
Subject: Quad Cities Generating Station
Date Issued: February 7, 2003 Expiration Date: December 11, 2005
Location: Quad Cities Nuclear Station,22710 206th Avenue North, Cordova, Rock Island County

This Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of support equipment for the nuclear generating station, including two (2) heating boilers (34.4 mmBtu/hr, each), one (1) auxiliary steam boiler (4.2 mmBtu/hr), five (5) large diesel engine generators (3-28 mmBtu/hr, each, 2-38.6 mmBtu/hr, each), various smaller diesel engines (used for electric-generation or pumping water)* and one (1) small gasoline storage tank and dispensing facility (tank capacity less than 2,000 gallons) equipped with vapor recovery system, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

* This permit does not address emergency engines maintained at the source by the Illinois Department of Nuclear Safety.

1a. This Federally Enforceable State Operating Permit (FESOP) is issued to limit the emissions of air pollutants from all the emission units combined, as listed in the above paragraph to less than major source thresholds, for example, less than 100 tons per year of nitrogen oxide (NO_x), as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

2a. Total consumption of natural gas in all boilers combined shall not exceed 60 million cubic foot per month and 191.5 million cubic foot per year.

b. Total usage of distillate fuel oil in large engines (generators and other engines with a capacity greater than 600 horsepower each) shall not exceed 70,000 gallons per month and 325,000 gallons per year, based on AP-42 emission factors.

c. Total usage of distillate fuel oil in the small engines with a capacity of 600 horsepower each or smaller shall not exceed 13,000 gallons per month and 39,000 gallons per year, based on AP-42 emission factors.

d. Annual gasoline throughput shall not exceed 50,000 gallons/year.

e. Compliance with annual limits shall be determined from a running total of twelve months of data.

3a. Each gasoline storage tank shall be equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

b. Pursuant to 35 IAC 215.583(a), gasoline shall not be transferred from a delivery vessel into a gasoline storage tank unless:

i. The vapors displaced from the tank during filling are processed by a vapor collection system (Stage I vapor recovery system) that prevents:

A. Vapor leaks, as shown by a reading equal to or greater than 100 percent of the Lower Explosive Limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 215.583(a)(2)(A) and (d)(4)(A)]; and

B. Avoidable leaks of liquid during the filling of storage tank [35 IAC 215.583(a)(2)(A) and (d)(4)(B)].

ii. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a)(2)(C)].

c. Pursuant to 35 IAC 215.583(c), the Permittee shall, with respect to the Stage I vapor recovery system on the gasoline storage tanks:

i. Provide instructions to the personnel operating the gasoline dispensing facility describing necessary maintenance operations and procedures for prompt notification of the Permittee in case of any malfunction of a vapor control system [35 IAC 215.583(c)(2)]; and

ii. Repair, replace or modify any worn out or malfunctioning component or element of design of the facility [35 IAC 215.583(c)(3)].

d. Pursuant to 35 IAC 215.583(d), personnel operating the gasoline dispensing facility shall, with respect to the Stage I vapor recovery system:

i. Maintain and operate the vapor control system in accordance with the owner’s instructions [35 IAC 215.583(d)(1)];

ii. Promptly notify the Permittee of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 215.583(d)(2)];

iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 215.583(d)(3)]; and

iv. Operate the vapor collection system, including delivery vessel unloading points, in a manner that prevents leaks as required by Condition 3(b)(i) above [35 IAC 215.583(d)(4)(A) and (B)].

e. Pursuant to 35 IAC 215.583(d)(5), within 15 business days after discovery of a leak in the vapor collection system on a gasoline storage tank that exceeds the limit of Condition 3(b)(i)(A) [35 IAC 215.583(d)(4)(A)], the Permittee shall repair and then retest the vapor collection system to show compliance.

4a. Emissions of volatile organic material (VOM) from storage and handling of gasoline shall not exceed 2.0 ton per year. This limit is based on standard USEPA emission factors for breathing and working losses and information provided in the permit application.

5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

6. At all times, the Permittee shall to the extent practicable, maintain and operate the above referenced emission sources, in a manner consistent with good air pollution control practice for minimizing emissions.

7a. Organic liquid by-products or waste materials shall not be used in any internal combustion engine without written approval from the Illinois EPA.

b. At the above location, the Permittee shall not keep, store, or utilize:

i. Distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:

A. 0.28 weight percent, or

B. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).

c. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

8. The Permittee shall maintain records of the following items:

   a. Hours of operation for each boiler, and for each diesel generator (hours/month and hours/year);

   b. Natural gas usage for all boilers (mmcf/month and mmcf/year);

   c. Fuel usage for the large engines (generators and other engines with a capacity greater than 600 horsepower) and for the various smaller diesel engines, (gallons/month and gallons/year);

   d. Documentation for sulfur content of fuel oil, e.g., analysis results of representative fuel samples or copies of fuel supplier certifications; and

   e. The Permittee shall maintain the following records for each gasoline storage dispensing facility, including associated gasoline storage tanks:

      i. A logbook or other record that identifies each shipment of gasoline added to each tank, with date and amount;

      ii. A logbook or other record of each inspection of the tanks and dispensing facilities to verify proper operation, with date and responsible individual;

      iii. Maintenance and repair records, as related to the repair or replacement of the Vapor Recovery Systems and storage tank loading pipes;

      iv. The combined gasoline throughput of the storage tanks, (gallons/month and gallons/year).

9. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

10a. The Permittee shall submit an Annual Emissions Statement to the Agency by May 1st of each year. This report shall include as a minimum: fuel oil consumption by the large diesel engines (generator and pumps greater than 600 horsepower), the other engines, natural gas consumption by boilers, and emissions of Nitrogen Oxide, Carbon Monoxide, and Sulfur Dioxide. If there has been no exceedence during the prior calendar year, the Annual Emissions Statement shall include a statement to that effect.

b. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means,

the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

11. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

Telephone: 217/782-5811 Facsimile: 217/782-6348

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

Telephone: 309/693-5461 Facsimile: 309/693-5467

Please note that this permit has been revised to address small engines and other small units at the source, without any increase in the source's permitted emissions, and to generally clarify applicable requirements.

If you have any questions concerning this permit, please call Youra Benofamil at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:YB:jar

cc: Region 2
IEPA, FOS - CMU
Lotus Notes

I.D. No.: 161807AAB
Application No.: 73020832
Facility: Quad Cities Nuclear Power Station

Attachment A

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario that results in maximum emissions from this source. This is handling 191.5 million cubic foot per year of natural gas and 364,000 gallons of distillate fuel oil. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO_x at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. Two Heating Boilers and One Auxiliary Boiler:

Limit on Total Fuel Usage: 191.5 Million Cubic Foot/Year

Pollutant	Emission Rate (Lb/10^6 scf)	Emissions (Tons/Yr)
NO_x	100	9.58
CO	84	8.04
SO_2	0.6	0.06
VOM	5.5	0.52
PM	7.6	0.73

These emissions reflect, AP-42 emission factors for natural gas-fired boilers.

2. Large Diesel Engines (Generators and other engines with a capacity greater than 600 horsepower each):

Limit on Total Fuel Usage: 325,000 Gallons/Year

Pollutant	Emission Rate (Lb/mmBtu)	Emissions (Tons/Yr)
NO_x	3.2	72.8
CO	0.85	19.34
SO_2	1.01 * 0.28 = 0.2828	6.45
VOM	0.09	2.05
PM	0.0697	1.60

These emissions reflect, AP-42 emission factors for internal combustion units, and a conversion factor of 140,000 Btu per gallon of distillate oil.

3. Small Diesel Engines with a capacity of 600 horsepower each or smaller:

Limit on Total Fuel Usage: 39,000 Gallons/Year

Pollutant	Emission Rate (Lb/mmBtu)	Emissions (Tons/Yr)
NO_x	4.41	12.04
CO	0.95	2.60
SO_2	0.29	0.80
VOM	0.36	0.98
PM	0.31	0.85

These emissions reflect AP-42 emission factors for internal combustion units and a conversion factor of 140,000 Btu per gallon of distillate oil.

4. Gasoline storage and handling:

Limit on Gasoline Throughput: 50,000 gallons/year

2.0 ton VOM per year

This reflects standard USEPA emission factors from Compilation of Air Pollutant Emission Factors, AP-42 for breathing and working losses.

5. Propane-Fired Engine Generators:

Limit on Total Fuel Usage: 8,000 Gallons/Year

Pollutant	Emission Rate (Lb/1,000 Gal)	Emissions (Tons/Yr)
NO_x	14	0.06
CO	1.9	0.01
VOM	----	0.05

6. Parts Washers:

Pollutant	Emissions (Tons/Year)
VOM	0.30

7. Miscellaneous, e.g., Welding:

Pollutant	Emissions (Tons/Year)
PM	0.07

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