

BACKGROUND INFORMATION FOR THE
DRAFT CAAPP PERMIT FOR
Central Illinois Light Company d/b/a AmerenCILCO - Edwards Plant

I. INTRODUCTION

Central Illinois Light Company d/b/a AmerenCILCO has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing power plant located in Peoria. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

II. EMISSION UNITS

Central Illinois Light Company d/b/a AmerenCILCO operates 3 coal-fired utility boilers and associated steam turbine generators to produce electricity. The plant has a nominal capacity of about 780 megawatts.

In addition to coal, these boilers fire fuel oil during startup and/or for flame stabilization. Other fuel materials, such as used oil, petroleum coke, natural gas, or fuel oil may also be fired with coal in the boilers. The boilers have electrostatic precipitators (ESP) and flue gas conditioning systems for control of particulate matter (PM). Nitrogen oxide (NO_x) emissions from the boilers are controlled by low-NO_x burners and Boiler 3 is also equipped with a selective catalytic reduction (SCR).

In addition to the utility boilers, the source also has emissions from ancillary equipments including coal and fly ash handling.

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions. In its most recent Annual Emission Report, for 2001, the source reported annual emissions of 428.91, 9,200.90, 524.78, 51,744.70, 51.46 tons of carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM), sulfur dioxide (SO₂), and volatile organic material (VOM), respectively.

IV. APPLICABLE EMISSION STANDARDS AND REQUIRMENTS

All emission units in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

The emission units at this source must also comply with applicable federal emission standards, which the Illinois EPA administers in Illinois on behalf of the United States EPA under a delegation agreement. The utility boilers at the source are existing boilers so are not subject to federal New Source Performance Standards. USEPA has not yet adopted National Emission Standards for Hazardous Air Pollutants (NESHAP) that apply to boilers. The CAAPP permit would not shield the source from the applicability of any such NESHAP standards.

These utility boilers are affected units subject to the federal Acid Rain Program, pursuant to Title IV of the Clean Air Act. Under the Acid Rain Program, the source must hold SO₂ allowances for its emissions of

SO₂. A copy the source's current Acid Rain permit will be included as an attachment to the CAAPP permit.

These utility boilers will also be affected units subject to the NOx Trading Program. This is a new interstate market-based program designed to reduce NOx emissions from electric power plants and other large NOx sources beginning in 2004. One of the procedural requirements of this program for a source with affected units is to hold a "budget permit." This budget permit sets forth the various requirements of the NOx Trading Program that would apply to the source. The Illinois EPA is proposing to include this budget permit as Section 6.1 of this CAAPP permit.

Because the plant is located in a major metropolitan area, it is subject to a state emissions standard for SO₂ that are more stringent than those applicable to less developed areas.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

For these coal-fired boilers, these compliance procedures include continuous monitoring for opacity and emissions SO₂ and NOx. These monitoring systems must be operated in accordance with the requirements of the federal Acid Rain Program.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21, the federal rules for Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification.

This permit would be a combined Title I/CAAPP permit. A combined CAAPP/Title I permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I of the Clean Air Act and regulations promulgated thereunder, e.g., the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. These terms and conditions in the CAAPP permit address the applicability, and compliance if determined applicable, of these Title I provisions. Such terms and conditions in the CAAPP permit are identified within the permit by T1, T1R, or T1N. For such provisions identified as T1R or T1N, the source has requested that the Illinois EPA revise or establish such conditions in a Title I permit, consistent with the information provided in the CAAPP application.

Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I until such time that the Illinois EPA revises or deletes them. Notwithstanding the expiration date on the first page of the permit, the

Title I conditions remain in effect pursuant to Title I until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit.