

ILLINOIS POLLUTION CONTROL BOARD  
February 15, 2001

IN THE MATTER OF: )  
)  
PROPOSED AMENDMENTS TO 35 ILL. ) R01-16  
ADM. CODE 217.SUBPART V, ELECTRIC ) (Rulemaking – Air)  
POWER GENERATION )

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by M. McFawn):

Today the Board adopts for second notice proposed rules to implement a program to control the emission of nitrogen oxides (NO<sub>x</sub>) emissions from fossil fuel-fired electrical generating units (EGUs) in Illinois. The program limits the amount of NO<sub>x</sub> emitted at EGUs during the ozone control period which is May 1 through September 30 of each calendar year, beginning in 2003. The principal control element of this program is a rate-based NO<sub>x</sub> emission limitation of 0.25 pounds of NO<sub>x</sub> per heat input of million British thermal units (0.25 lbs/mmbtu) of actual heat input. The remaining proposed rules regulate how compliance with the rate-based rule is to be monitored, demonstrated and reported at EGUs statewide.

All of the rules proposed for second notice will be added at Subpart V of Part 217: Nitrogen Oxides Emissions of the Board's air regulations. 35 Ill. Adm. Code 217.<sup>1</sup> In addition to the rate-based NO<sub>x</sub> emission limitation, the proposed rules include a NO<sub>x</sub> averaging rule that allows the emissions from multiple EGUs to be averaged to demonstrate compliance with the 0.25 lbs/mmbtu limitation. Also included are the rules prescribing the attendant monitoring, as well as the reporting and recordkeeping requirements with which the EGUs must comply. The individual rules are discussed later in this opinion, along with a discussion of the purpose and applicability provisions of this program.

This rate-based emission limitation program is intended to satisfy one of the State's several obligations under the federal Clean Air Act Amendments of 1990 (CAAA) 42 U.S.C.S. § 7401 *et seq.* Under the CAAA, the State is obligated to submit a State Implementation Plan (SIP) that demonstrates attainment for the moderate ozone nonattainment area of Metro-East/St. Louis (hereinafter referred to as Metro-East NAA.) Section 107(a) of the CAAA (42 U.S.C. § 7407(a) (1990)) imposes on the State the primary responsibility for ensuring that Illinois meet the National Ambient Air Quality Standards (NAAQS) for ozone. The State is required thereunder to submit a SIP that specifies emission limitations, controls, and other measures necessary for the attainment, and enforcement, of the NAAQS for ozone in this State. The Illinois SIP necessary for Illinois to demonstrate attainment in the Metro-East NAA has fluctuated over the last several years in response to two pending federal court cases.

---

<sup>1</sup> Currently, Subpart V contains only a site-specific rule applicable to the Lake of Egypt Power Plant operated by Southern Illinois Power Cooperative. 35 Ill. Adm. Code 217.521

Both cases and their impact on the Illinois SIP are discussed in greater detail below at pages 4-7.

Originally, the Illinois Environmental Protection Agency (Agency) intended to satisfy all the State's Section 107(a) CAAA obligations with the adoption of a NO<sub>x</sub> trading program. The trading program would apply to EGUs and non-EGUs statewide. That EGU portion of the program was proposed by the Agency in 35 Ill. Adm. Code 217.Subpart W, The NO<sub>x</sub> Trading Program For Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 and 217 (July 13, 2000), R01-9, (NO<sub>x</sub> Trading Program or Subpart W) adopted by the Board on December 21, 2000. That rulemaking created a new Subpart W in the Board's air regulations at Part 217. However, a federal court recently ordered the implementation date for that program delayed from May 1, 2003, until May 31, 2004.<sup>2</sup> Regardless, Illinois is required to submit control strategies necessary to demonstrate attainment of the 1-hour NAAQS for the Metro-East NAA by May 1, 2003. Due to the newly adopted implementation date of May 31, 2004, the State can no longer satisfy its CAAA obligation for the Metro-East NAA with the adoption of Subpart W. To remedy this, the new rules at Subpart V limiting NO<sub>x</sub> emissions beginning in the 2003 ozone season are now required.

### PROCEDURAL HISTORY

The Agency filed this rulemaking proposal with the Board on October 16, 2000. The Board adopted the rules as proposed by the Agency for first notice on October 19, 2000. See Proposed Amendments to 35 Ill. Adm. Code 217.Subpart V, Electric Power Generation (October 19, 2000), R01-16. The first-notice rules were published in the *Illinois Register* on November 3, 2000. 45 Ill. Reg. 16,200.

The Board held public hearings in this matter in Chicago, Illinois, on November 28, 2000, and December 19, 2000, before Board Hearing Officer Bobb Beauchamp, and Board Member Marili McFawn.<sup>3</sup> Hearings were scheduled and conducted in accordance with Section 28.5 of the Act. 415 ILCS 5/28.5 (1998). Section 28.5 provides for "fast-track" adoption of certain regulations necessary for compliance with the CAAA.

Agency attorney Vera Herst presented four staff members as witnesses at hearing: Dennis Lawler, Manager of the Division of Air Pollution Control, Robert Kaleel, Manager of the Modeling Unit, Air Quality Planning Section, Division of Air Pollution Control, and Berkley Moore and Yoginder Mahajan of the Air Quality Planning Unit (Tr.1 at 14-79). Much of Kaleel and Lawler's testimonies were submitted as prefiled testimony, Exhibits 1 and 2, respectively.<sup>4</sup> Also present from the Agency to answer questions was Christopher Romaine, Manager of the Utilities Unit, Permitting Section. Steven Whitworth of Ameren Corporation

---

<sup>2</sup> The federal case is Michigan v. EPA, 213 F.3d 663 (D.C. Cir. 2000), and is discussed at page 6 of this opinion.

<sup>3</sup> The transcripts of the hearing will be cited as "Tr.1 at \_\_\_\_" and "Tr.2 at \_\_\_\_."

<sup>4</sup> Exhibits will be cited as "Exh. \_\_\_\_ at \_\_\_\_."

was the only member of the regulated community who provided testimony at the hearings. Tr.2 at 37-45.

Section 27(b) of the Act requires the Board to request that the Department of Commerce and Community Affairs (DCCA) conduct a study of the economic impact of any proposed rules, and to conduct at least one public hearing on the economic impact of those proposed rules (415 ILCS 5/27(b) (1998)). The Board requested DCCA conduct such a study in an October 26, 2000 letter. At the December 19, 2000 hearing, the Board hearing officer stated that the Board would rely on a March 10, 2000 DCCA letter stating that DCCA would not conduct economic impact studies on rules pending before the Board. Tr.2 at 6-7. The Board hearing officer asked for, but did not receive, any comments on the economic impact of these rules. Tr.2 at 35-36.

The record in this matter closed on January 5, 2001, as required at Section 28.5(l) of the Act. On December 26 2000, the Agency filed a Motion To Amend the rules adopted for first notice, and the “Agency Analysis of Economic and Budgetary Effects of Proposed Rulemaking.” The Board also received three timely filed public comments: Dominion Generation (PC 1), the Agency (PC 2), and Midwest Generation (PC 3). Ameren Corporation filed a public comment on January 10, 2001 (PC 4).<sup>5</sup>

#### JUSTIFICATION OF PROPOSED RATE-BASED RULE

The State of Illinois has the primary responsibility under the CAAA for ensuring that all NAAQS are met in the State. This includes the NAAQS for ozone. 42 U.S.C. 7407(a)(1990). Ex 2. at 4. The Metro-East NAA has not yet demonstrated attainment of the NAAQS for ozone. *Id.* Therefore, the State’s SIP must specify the emission limitations and controls necessary for ozone attainment to be achieved in the Metro-East NAA. To accomplish that federal mandate, the Agency proposed this rulemaking that is premised on a rate based emission limitation of 0.25 lbs NO<sub>x</sub>/mmbtu for large EGUs statewide. In support of that limitation, the Agency presented the air quality modeling which demonstrates that such a limitation would achieve attainment for the Metro-East NAA.

The Agency submitted the results of photochemical air quality modeling analyses to support the 1-hour ozone attainment demonstration for the Metro-East NAA. The attainment demonstration modeling was performed by using the Urban Airshed Model, Version V (UAM-V), which was also used by the Ozone Transport Assessment Group in formulating its recommendations, and by the United States Environmental Protection Agency (USEPA) in support of the “NO<sub>x</sub> SIP Call.”<sup>6</sup> Exh. 1 at 2. The modeling was done by using emissions inputs for 1996 base year, and future-year scenarios representing the attainment deadline of 2003. Exh. 1 at 3.

---

<sup>5</sup> The public comments filed in this rulemaking will be referred to as “PC \_\_\_ at \_\_\_.”

<sup>6</sup> “NO<sub>x</sub> SIP Call” refers to a USEPA document requiring certain states to amend their SIPs. See pages 6-7 for additional information.

The Agency performed a series of UAM-V simulations to evaluate the various future-year control scenarios to develop a control strategy that would demonstrate attainment of 1-hour ozone NAAQS in Metro-East NAA by 2003. Exh. 1 at 4. The scenarios relevant to the instant proposal included: CAAA controls (includes 15% ROP, reformulated gasoline, enhanced inspection and maintenance, etc.); CAAA controls plus a rate based limit of 0.25 lbs NO<sub>x</sub>/mmbtu on utilities; and CAAA controls plus NO<sub>x</sub> SIP Call (0.15 lbs NO<sub>x</sub>/mmbtu emissions cap on utilities) plus NO<sub>x</sub> SIP Call reductions for non-utilities.

Based on the modeling results, the Agency stated that while substantial reductions in ozone concentrations can be expected from the implementation of the CAAA control measures, such reductions would not be adequate to demonstrate attainment of the 1-hour ozone NAAQS in the Metro-East NAA. Exh. 1 at 5. In this regard, the Agency asserted that the control level represented by the 0.25 lbs NO<sub>x</sub>/mmbtu would be necessary to demonstrate attainment for the Metro-East NAA. Tr.1 at 50.

### BACKGROUND OF FEDERAL REQUIREMENTS AND JUDICIAL ACTIVITY

Over the last several years, the State has committed to demonstrating attainment in the Metro-East NAA in accordance with the CAAA and has examined several rulemaking approaches for fulfilling that commitment. During that same time, the control methods necessary to successfully demonstrating attainment have fluctuated due to a complex series of USEPA rulemakings and federal litigation. Those significant events and their effects are described below. Summarized first is the complaint by the Sierra Club and the Missouri Coalition for The Environment against the USEPA for failing to reclassify the Metro-East NAA from a moderate to a serious nonattainment area by the CAAA's statutory deadline. Described second are the USEPA's NO<sub>x</sub> SIP Call and the on-going litigation challenging it. Of most significance to this rulemaking is the change in the implementation date for the NO<sub>x</sub> SIP Call recently ordered in that litigation.

#### SIP Requirements for Metro-East NAA

Lawsuit Seeking Reclassification of the Metro-East NAA. On November 11, 1998, the Sierra Club and the Missouri Coalition for the Environment filed a complaint for declaratory and injunctive relief in the U.S. District Court for the District of Columbia against Carol Browner, Administrator of USEPA. (*Sierra Club v. Carol M. Browner*, No. 98-2733). One count of the complaint alleges that USEPA failed to perform certain nondiscretionary duties under the CAAA regarding failure of the Metro-East NAA to achieve attainment. Exh. 2 at 7. If sustained, this count would require USEPA to reclassify the Metro-East NAA from a moderate to a serious ozone nonattainment area. *Id.* This reclassification would impose additional control requirements mandated by the CAAA for serious ozone areas on sources within the Metro-East NAA. *Id.* Yet, Illinois' attainment demonstration shows that the particular additional controls required of serious ozone NAAs are not necessary for the Metro-East NAA to attain the NAAQS. *Id.* USEPA and Illinois filed pleadings in *Sierra Club* that

stated their intention to ensure the Metro-East NAA satisfies the requirements to avoid reclassification. Exh. 2 at 7.

USEPA Reclassification of Metro-East NAA. On March 18, 1999, the USEPA published a proposed rule entitled “Clean Air Reclassification and Notice of Potential Eligibility for Attainment Date Extension, Missouri and Illinois, St. Louis Nonattainment Area; Ozone.” 64 Fed. Reg. 13,384 (March 18, 1999). In this proposed rule, USEPA found that the Metro-East NAA had not met the attainment date applicable to moderate NAAs, and stated that if there was a final finding of nonattainment, the area would be reclassified by operation of law to a serious ozone nonattainment area.

USEPA Adopts Extension Policy. On March 25, 1999, USEPA published a guidance memorandum entitled “Extension of Attainment Dates for Downwind Transport Areas.” (Extension Policy). 64 Fed. Reg. 14,441 (March 25, 1999). The Extension Policy recognized that a “number of areas may find themselves facing the prospect of being reclassified or ‘bumped up’ to a higher classification in spite of the fact that pollution beyond their control contributes to the levels of ozone they experience.” Under the Extension Policy, such areas could be granted an extension of their attainment date if the area does several specific tasks. Those four tasks are set forth in detail at 64 Fed. Reg. 14,443.

Agency SIP Submittals under NO<sub>x</sub> SIP Call and the Extension Policy. In October 1999, Illinois committed to implementing statewide reductions of NO<sub>x</sub> from sources within the State. This commitment was included in a draft supplement of Illinois’ attainment SIP for the Metro-East NAA. Exh. 2 at 6. The final attainment strategy for the area in the October SIP supplement assumes that, beginning in 2003, most of the 23 jurisdictions affected by the USEPA’s NO<sub>x</sub> SIP Call would limit NO<sub>x</sub> emissions from large EGUs to an emissions rate of no more than 0.25 lbs/mmbtu. Exh. 2 at 6.

On April 17, 2000, USEPA proposed to approve the 1-hour attainment demonstration SIP for the Metro-East NAA, contingent on the States of Illinois and Missouri preparing revised modeling to incorporate corrections to their 1996 base year emissions inventories and upon each state submitting rules to implement the control levels relied upon in the modeling. 65 Fed. Reg. 20,404 (April 17, 2000). The revisions to the modeling and drafts of proposed rules were submitted to USEPA on June 29, 2000, and adopted rules from both states were due to USEPA on December 31, 2000. Exh. 2 at 6.

On June 30, 2000, Illinois submitted revised modeling and proposed rules to USEPA. To satisfy the USEPA requirement that final rules be adopted by year’s end, on December 21, 2000, the Board adopted the new NO<sub>x</sub> trading program at Subpart W, which was originally intended by the Agency to meet this obligation, as well as the statutory mandates of Section 9.9 of the Act. 35 Ill. Adm. Code 217.Subpart W, The NO<sub>x</sub> Trading Program For Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 and 217 (December 21, 2000), R01-9. However, as explained below, that regulatory program will not be implemented until May 31, 2004, that is 13 months after the 2003 ozone season.

### NO<sub>x</sub> SIP Call and State's Obligations

NO<sub>x</sub> SIP Call Issued by USEPA. On October 27, 1998, the USEPA promulgated a document titled "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Regions for Purpose of Reducing Regional Transport of Ozone." 63 Fed. Reg. 57,356 (October 27, 1998). This document, and the requirements it imposes on states, is commonly known as the "NO<sub>x</sub> SIP Call."

In the NO<sub>x</sub> SIP Call, USEPA determined that sources and emitting activities in 23 jurisdictions emit NO<sub>x</sub> in amounts that "significantly contribute" to the nonattainment or interfere with the maintenance of the 1-hour ozone NAAQS in one or more downwind areas in violation of CAA Section 110(a)(2)(D)(i)(I). 63 Fed. Reg. 57,356. USEPA requires the identified upwind jurisdictions to submit revised SIP revisions that will reduce those amounts of NO<sub>x</sub> emissions. Illinois is one of the 23 jurisdictions identified.

The NO<sub>x</sub> SIP Call requires that Illinois, along with the other 21 States and the District of Columbia, develop plans to limit NO<sub>x</sub> emissions to a budget specified by the USEPA in the NO<sub>x</sub> SIP Call. If a state fails to adopt a plan acceptable to USEPA, USEPA will impose its own plan.

Agency Responses to the NO<sub>x</sub> SIP Call and Recent Judicial Actions. USEPA's NO<sub>x</sub> SIP Call was challenged in the federal court. Michigan v. EPA, 213 F.3d 63 (D.C. Cir. 2000). Over the course of that litigation, the federal court has made several rulings that have directly impacted the approach Illinois has planned to take to satisfy the NO<sub>x</sub> SIP Call. The Agency explained over the course of this rulemaking and the other NO<sub>x</sub> rulemakings that it took the following actions in response to the NO<sub>x</sub> SIP Call and the judicial changes to the same.

The NO<sub>x</sub> SIP Call was issued on October 27, 1998. In late 1998, the Agency met with the representatives of industry and environmental groups to notify them of the Agency's intent to proceed with development of rules responsive to the NO<sub>x</sub> SIP Call. On May 25, 1999, the Court of Appeals for the D.C. Circuit stayed the submittal date for SIPs under the NO<sub>x</sub> SIP Call. In response, the Agency shifted its attention to the attainment demonstration for the Metro-East NAA due by November 15, 1999. The Agency's modeling analysis indicated that NO<sub>x</sub> reductions that could be obtained from application of a rate of no more than 0.25 lbs NO<sub>x</sub>/mmbtu to large EGUs beginning in May 2003 would be sufficient to attain the 1-hour ozone NAAQS in the Metro-East NAA.

On March 3, 2000, the D.C. Circuit upheld the NO<sub>x</sub> SIP Call. The Agency returned to developing a NO<sub>x</sub> trading program to comply with both the NO<sub>x</sub> SIP Call and to satisfy its Metro-East attainment demonstration. The Agency again met with representatives of industry, environmental groups, and owners of large EGUs and new EGUs which would be regulated

under a NO<sub>x</sub> trading program.<sup>7</sup> On June 22, 2000, the D.C. Circuit removed the stay it had previously imposed on May 25, 1999. On or about July 7, 2000, USEPA represented to Illinois and others that the May 1, 2003 implementation date for the NO<sub>x</sub> SIP Call remained intact. The Agency then met with the same representatives on June 27 and July 6, 2000, and very quickly thereafter filed its NO<sub>x</sub> Trading Program proposal, R01-9, with the Board on July 11, 2000.

Judicial Change in NO<sub>x</sub> SIP Call Implementation Date. On August 30, 2000, the D.C. Circuit moved the implementation date for the attainment programs under the NO<sub>x</sub> SIP Call to May 31, 2004. This ruling had two impacts. First, in accordance with Section 9.9(f) of the Act, the Agency moved to amend its proposal in R01-9 to change the implementation date for Subpart W from May 1, 2003 to May 31, 2004. The Board adopted that change when Subpart W was adopted as final.

There is a second and more significant impact created by the judicially imposed delay in the NO<sub>x</sub> trading program. Because the implementation date for Subpart W was delayed for 13 months, the NO<sub>x</sub> Trading Program could no longer serve to satisfy the State's SIP obligations for the Metro-East NAA, as well as the NO<sub>x</sub> SIP Call requirements. Therefore, the Agency once again returned to developing a NO<sub>x</sub> emission rate-based rule, and on October 16, 2000, proposed that program to the Board to satisfy the State's SIP obligations for the Metro East NAA.

#### Sierra Club Recent Developments

On January 29, 2001, the Court in Sierra Club ordered the USEPA to determine whether the Metro-East NAA reached attainment and to publish any notices required as a result of that determination no later than March 12, 2001. Since the implications of the recent District Court's order were unclear, the Board requested information and input from the Agency. See Board Order of February 1, 2001 in this matter.

In our order, we requested the Agency provide any additional comments or information it may have about the District Court's order and the USEPA's reaction to it, as well as the Agency's opinion about the impact of the District Court's order on this rulemaking and the State of Illinois. The Agency responded on February 7, 2001, as requested (Response).

In its Response, the Agency recommends that the Board proceed to adopt the proposed Subpart V for second notice. This request is based upon the Agency's belief that Subpart V is an "essential safety net" for the uncertainties involving the Metro-East NAA attainment demonstration, Subpart W, the NO<sub>x</sub> SIP Call. The Agency then itemized the various uncertainties surrounding this obligation.

---

<sup>7</sup> We note that Section 9.9 of the Act requiring the Board and the Agency to meet its SIP obligations with a NO<sub>x</sub> trading program was adopted on August 19, 1999.

First in question is the date by which the Metro-East NAA must attain the ozone standard. The Agency informed the Board that in January 2001, the USEPA indicated its intent to establish May 31, 2004, as the attainment date for the Metro-East NAA. While this date coincides with the implementation date of the NO<sub>x</sub> SIP Call and Subpart W, the Agency cautions that it is subject to change after notice and comment in the federal rulemaking, as well as possible future legal challenges.

Second, as for the District Court's order in *Sierra Club*, the Agency informed the Board that to the best of its knowledge, USEPA has not yet determined how it will respond to the District Court's order. The Agency also advises the Board that the practical effect of the District Court's Order is unclear, especially since it did not address the validity of the USEPA's Extension Policy. Also, the Agency informed us that it is exploring the possibility of an appeal of the District Court's order.

Finally, the Agency reminds the Board that Subpart W must still be approved by the USEPA as a SIP amendment. On January 25, 2001, EnviroPower, L.L.C. filed with the First District Appellate Court an appeal of the Board's final order adopting Subpart W. 35 Ill. Adm. Code 217. Subpart W, the NO<sub>x</sub> Trading Program for Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 and 217 (December 21, 2000), R01-9, appeal docketed, No. 1-01-0324 (1st App. Dist.) Jan. 25, 2001.

The Agency concludes with a recommendation that, in light of the legal uncertainties on both the state and federal levels, the Board proceed to second notice with this rulemaking. The Agency notes that Subpart V can be altered or repealed, as necessary, in future rulemaking.

## RATE-BASED NO<sub>x</sub> EMISSION LIMITATION RULES

### Purpose and Timeframe

The purpose of this Subpart V program, as set forth at proposed Section 217.700, is to control NO<sub>x</sub> emissions from EGUs during the "ozone control period" which is defined therein as May through September 30 of each year. The implementation date for Subpart V is also provided in Section 217.700. The requirements of Subpart V are initially applicable May 1, 2003. As explained above, this implementation date is different from that adopted for Subpart W. Subpart V is applicable 13 months in advance of the May 31, 2004 implementation date for the Trading Rule Program in Subpart W. After May 31, 2004, both programs are applicable to large EGUs. See 35 Ill. Adm. Code 217.704 and 217.750.

The method for controlling NO<sub>x</sub> emissions under Subpart V is also summarized at proposed Section 271.700. That control is to be achieved by limiting the emissions of NO<sub>x</sub> from EGUs to no more than 0.25 lbs NO<sub>x</sub>/mmBtu of actual heat input during the ozone control period. 35 Ill. Adm. Code 217.700.

### Implementation Date and Applicability

Subpart V will apply to large EGUs in the entire State of Illinois. There are 103 existing large EGUs owned by nine electric utility companies that the proposed regulations are expected to affect. These are the EGUs listed at Appendix F of Subpart 217 adopted in R01-9 as part of the NO<sub>x</sub> Trading Program. Tr.1 at 55-58.

Section 217.704 specifically provides in pertinent part that Subpart V will apply to the following EGUs:

- (a) any unit serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, excluding those units listed in Appendix D, or added to Appendix D; and
- (b) any unit with a maximum design heat input that is greater than 250 mmbtu/hr, that commenced operation on or after January 1, 1999, that serves at any time a generator that has a nameplate capacity of 25MWe or less, and, that has the potential to use more than 50% of a unit's potential electrical output capacity of the unit.

The proposed rules will apply to the same EGUs that are covered by Subpart W. The language at Section 217.704(a) is the same as that at Section 217.754(a) of Subpart W, except for the language underlined above. The non-EGUs that are excluded from Subpart V are those listed or later added to at Appendix D which was adopted with Subpart W. They are excluded because their primary business is not the production of electricity, and these sources were not modeled at the 0.25 lbs/mmbtu emission rate in the State's attainment demonstration for the Metro-East NAA. Tr.1 at 56.

Pursuant to Section 217.704(b), Subpart V also applies to emission units commencing operation after January 1, 1999, and provides the method to determine whether a large (more than 250 million Btu per hour heat capacity) unit is designed primarily for production of electricity rather than to provide steam or heat for process emission units. The primary purpose of the unit is determined by multiplying the unit's heat input by a factor of 0.0488. That factor is based on standard conversion factors relating British thermal unit to watts, the fact that only one-third of a unit's heat input is ordinarily converted into electricity, and that if a generator requires more than one-half of the unit's heat input to generate electricity at full capacity, the emission unit's primary purpose must be for the production of electricity. Tr.2 at 56-57.

Objections to Overlap of Subparts V and W. Two participants commented that the proposed requirements of Subpart V will be burdensome and repetitive once the new

requirements of Subpart W are implemented on May 31, 2004. PC 1 and PC 4. Dominion Generation stated that it believes that the rate-based approach contained in Subpart V will no longer be necessary once the “more stringent Subpart W rule is implemented,” and asks the Board to revoke Subpart V once Subpart W becomes effective. PC 1 at 3. Ameren Corporation asks that the Board “acknowledge that it will consider repealing Subpart V through the rulemaking process when (and if) Subpart W becomes effective.” PC 4 at 2. Ameren Corporation stated that the principle problem with both regulatory programs remaining in force is that the dual reporting requirements will be burdensome, confusing and unnecessary. Tr.2 at 40-41. For a more complete description of both reporting requirements, see pages 12-13 of this opinion.

The Agency’s position on this issue is that Subpart V should remain in effect after Subpart W becomes effective. PC 2 at 3. The Agency believes that the “continued effectiveness of Subpart V will provide a level of certainty with respect to the attainment demonstration for the Metro-East NAA, independent of future developments with regard to USEPA’s NO<sub>x</sub> SIP Call.” *Id.* See also Tr.1 at 102, 109.

The monitoring and reporting requirements for Subpart V are found at Sections 217.710 and 217.712. The Board recognizes that these requirements are different and independent from those recently adopted by the Board in Subpart W, the NO<sub>x</sub> Trading Program in R01-9. However, in light of the continuing debate over the NO<sub>x</sub> SIP Call, the Board agrees with the Agency that it is not appropriate to include an automatic revision or repeal of these amendments now proposed in Subpart V. As suggested by Ameren Corporation, the Board is always able to consider whether all or part of Subpart V is still necessary in a future rulemaking proceeding. Also, since legal challenges to Subpart W and the NO<sub>x</sub> SIP Call are pending, the Board believes it prudent to leave to future rulemaking any refinements in Subpart V that may prove necessary or beneficial.

#### Emission Limitations

Section 217.706(a) provides the actual rate-based emission limitation. As proposed, it prohibits any owner or operator from causing or allowing NO<sub>x</sub> emissions from affected EGUs to exceed 0.25 lbs/mmBtu of actual heat input during each ozone control period, based on a control period average for that unit. The proposed rules also state that any affected EGU subject to a NO<sub>x</sub> emission limitation more stringent than 0.25 lbs/mmBtu must comply with Subpart V’s requirements as well as the more stringent emission limitation. This Section also provides that the emission limitation may be achieved by individual units participating in an averaging demonstration pursuant to the provisions of Section 217.708. Tr.1 at 58.

#### NO<sub>x</sub> Averaging

At Section 217.708, specified EGUs are allowed to meet the 0.25 lbs/mmBtu emission limitation through NO<sub>x</sub> averaging for the ozone control period. Owners and operators of EGUs listed in Appendix F of Part 217 may demonstrate compliance by averaging for a control

period the NO<sub>x</sub> emission rates with any other EGUs listed in that appendix.<sup>8</sup> Appendix F lists those EGUs that commenced operation on or before January 1, 1995. The mathematical representation of the averaging formula is given in subsection (b) of Section 217.708. Tr.1 at 58-60.

Section 217.708(a) also provides that Soyland Power (Soyland) is allowed to use NO<sub>x</sub> averaging for any EGUs at its Alsey, Illinois facility that commenced operation on or before January 1, 2000. Soyland is a rural electric cooperative in Alsey, Illinois, that recently developed a peaking station with used turbines. Tr.1 at 102. The Agency testified that Soyland's used turbines cannot comply with the proposed NO<sub>x</sub> emission rate because of their age. The Agency explained further that it is not feasible for Soyland to take measures to reduce emissions from these turbines due to their age and because they are operated as peaking units. Tr.1 at 103. Because of the date they began operating, these turbines qualify as new units. Tr.1 at 102. Absent such a specified rule, new EGUs cannot use the NO<sub>x</sub> averaging rule to demonstrate compliance. The Agency concluded that the purpose of including Soyland in the proposed averaging rule is to accommodate that very special circumstance of this rural cooperative. Tr.1 at 103. Thus, the EGUs listed at Appendix F and those at Soyland's Alsey, Illinois facility may average their emission rates to demonstrate compliance with Subpart V's rate-based emission limitation. If they elect to do so, the provisions of Section 217.708 are applicable.

Section 217.708(c) provides that emission averaging must be conducted via federally enforceable permit conditions, and subsection (d) allows each unit to be included only once in a NO<sub>x</sub> averaging demonstration during a control period. Subsection (d) is included to prevent 'double-counting' of overcomplying emission units. As explained by the Agency, the difference in allowable and actual emission from each averaging unit can be used only one time by other under-complying units. Tr.1 at 60.

EGUs electing to use averaging must demonstrate compliance by November 30 following each ozone control period. If compliance is not demonstrated, the compliance status of each EGU participating in the NO<sub>x</sub> averaging demonstration will be determined as if the emissions rates of the EGUs were not averaged. Section 217.708(e) and (f). Tr.1 at 60.

At hearing, the Board questioned the Agency about how facilities electing to use averaging would keep the records required by the proposed regulations. Tr.1 at 130-131. The Agency responded that it is "appropriate to explicitly state as part of Subpart V that you have to have the appropriate records to be able to average to show compliance." Tr.2 at 16. The Agency suggested adding new subsection (g) to Section 217.708 to address this concern. PC 2 at 2. The Board agrees and incorporates it as new Section 217.708(g).

---

<sup>8</sup> Appendix F was adopted on December 21, 2000, in R01-9. 35 Ill. Adm. Code 217.Subpart W, the NO<sub>x</sub> Trading Program for Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 And 217 (December 21, 2000), R01-9.

The new language at Section 217.708(g) clearly precludes NO<sub>x</sub> averaging should the owner or operator of an EGU involved in averaging fail to maintain or submit to the Agency the required records, data or reports. When read together, these subsections provide that in the event an EGU involved in NO<sub>x</sub> averaging fails to maintain the necessary record, none of the EGUs involved can average, and each EGU will have to individually demonstrate compliance with the 0.25 lbs/mmBtu emission limitation, not just those failing to maintain or submit their reports. Pursuant to Section 217.706, that compliance demonstration will be based on a control period average for each EGU involved. Tr.1 at 60.

### Monitoring

At first notice, proposed Section 217.710 required each EGU to have continuous monitoring systems (CEMS) for NO<sub>x</sub> that met the requirements of 40 C.F.R. Part 75, subpart B. There is an exemption in subsection (b) to allow oil and gas-fired peaking units to use the emissions estimation protocol of 40 C.F.R. Part 75, Subpart E. This emissions protocol provides that other kinds of monitoring systems may be used, so long as they can be shown to be of equivalent precision, reliability, accessibility, and timeliness.

According to the Agency, the monitoring required under Subpart V is nearly identical to the monitoring requirements to that imposed by Subpart W units, but notably will be required a year earlier due to Subpart V's early implementation date. The Agency also noted that Subpart V's monitoring requires an additional calculation step, *i.e.*, determining emissions in pounds per million Btu. Tr.1 at 60-61.

During the hearings, Scott Miller of Midwest Generation testified that it owned several "low capacity factor" EGUs that would be required under Section 217.710 as proposed to use CEMS. Tr.1 at 83-87. Miller suggested that a second, alternative monitoring requirement be added for low capacity factor EGUs. Tr.1 at 84-85.

In its motion to amend, the Agency suggested adding new language that provides an alternative method to determine the heat input and NO<sub>x</sub> emissions of a combustion turbine that operates less than 350 hours per control period. Agency Motion to Amend at pages 2-3. Midwest Generation and Ameren Corporation support this change. PC 3 at 4; PC 4 at 1.

The Board agrees with the Agency and the public comments that the new language will reduce the burden on low capacity factor EGUs, and has added new language at proposed Section 217.710(c). Proposed Section 217.710(c) defines a low capacity factor EGU as a combustion turbine that operates less than 350 hours per ozone control period. To determine NO<sub>x</sub> emissions from those types of units, the owners or operators may use certain default emission factors and a heat input derived from either metered fuel usage or a calculation based upon the turbine's maximum hourly heat input and its hours of operation. This alternative to the Part 75 monitoring requirements otherwise required at Section 217.710(a) is limited to low capacity factor EGUs.

### Reporting and Recordkeeping

At first notice, Section 217.712 required owners and operators of EGUs subject to the rule to: (1) comply with the NO<sub>x</sub> emissions record keeping and reporting requirements of 40 C.F.R. Part 75; (2) certify to the Agency that the report is true and accurate; (3) keep all records and data necessary to demonstrate compliance for five years; (4) make such records available upon request to the Agency and USEPA; and, (5) submit copies of records and data to the Agency within 30 days of the Agency's written request. Tr.1 at 61-62.

In Midwest Generation's testimony, Miller also requested that low capacity factor EGUs be allowed to utilize an alternative reporting and recordkeeping method to alleviate the costs of complying with the requirements of 40 C.F.R. Part 75. In its motion to amend, the Agency suggested adding language at Section 217.712(b) that would allow the owner or operator of a combustion turbine using the alternative monitoring method provided at Section 217.710(c) to also be allowed to use an alternative recordkeeping method. Midwest Generation approves of this proposed change. PC 3 at 4.

The Board agrees with the proposed alternative recordkeeping requirements proposed by the Agency in response to Midwest Generation's testimony. The new recordkeeping requirements appear at new Section 217.712(b). These new recordkeeping requirements now conform to the new monitoring options afforded low capacity factor EGUs. Together, these two rules should effectively alleviate the burden and cost of the continuous monitoring requirements of 40 C.F.R. Part 75.

### Early Reduction Credits

Although Subpart V does not directly address early reduction credits, Dynergy Midwest Generation (Dynergy) questioned the impact of Subpart V on the availability of early reduction credits under Subpart W. Tr.1 at 111. Early reduction credits (ERCs) are an element of the NO<sub>x</sub> Trading Program in Subpart W. Generally, EGUs may earn ERCs if the EGU has reduced its NO<sub>x</sub> emissions at least 30% below the annual emission rate required in the EGU's applicable Title IV (of the CAAA) permit or other applicable federally enforceable permit. 35 Ill. Adm. Code 217.770(c). The reductions must occur during the ozone control period immediately preceding the year the EGU want to use the credit.

The Agency is required to allocate a fixed number (15,261) of ERCs over a three year period. 35 Ill. Adm. Code 217.770(f). In general, that rule requires the Agency to distribute not more than one-half of the total ERC allowances available in the compliance supplement pool (CSP) for reductions made in 2001; and do the same again for reductions made in 2002. Finally, if any of the ERC allowances remain in the CSP, the Agency must allocate the remaining ERC for reductions made in 2003. See 35 Ill. Adm. Code 217.770(f)(2).

In response to Dynergy's question, at the second hearing the Agency testified:

It's the Agency's position that proposed Section 217.770 requires an EGU reduce its NO<sub>x</sub> emission rate at least 30 percent below .25 pounds per million btu to earn ERCs in the 2003 control period . . . . The Agency believes it is likely that few, if any, ERCs will be available in 2003. The Agency, therefore, does not believe that complying with Subpart V will have a significant impact [on an] EGUs ability to earn ERCs under Subpart W. Tr.2 at 14-15.

A little later, the Agency repeated its position that "[t]o the extent that ERCs are available in 2003, they are reasonably restricted to sources that have gone well beyond the .25 pounds per million btu required by Subpart V . . . ." Tr.2 at 15. The Agency also testified about the regulatory scheme for allocating ERCs as described above, and testified that "any ERCs not earned in the 2001 and 2002 control periods may be earned in the 2003 control period". Tr.2 at 14-15.

Dominion Generation submitted a public comment advocating that:

ERCs should be granted for any reductions achieved during the 2003 ozone season that are below the 0.25 lb/mmBtu rate required by the Subpart V rule, provided that both the 0.25 lb/mmBtu rate and the emission rate achieved are at least 30% below the unit's Title IV emission rate or other federally enforceable limit at the time the Subpart W rule is adopted. PC 1 at 3.

Dominion Generation advocates its interpretation for two reasons. First, Dominion Generation believes there will be significant impact on the amount of ERCs available for reductions made as late as 2003 due to the delayed implementation date of the NO<sub>x</sub> Trading Program. Second, Dominion Generation believes that restricting the baseline in this manner "would provide reasonable assurances that meaningful reductions were being achieved by sources requesting ERCs." PC 1 at 3.

The Board agrees that if the USEPA does not act by May 1, 2001, to approve the NO<sub>x</sub> Trading Program, up to 50% of the CSP allowances may be available for ERCs generated in 2003. See 35 Ill. Adm. Code 217.770((f)((2)). The new Subpart W recognizes this, and accounted for this possibility. Section 217.770 (f)(2)(C) provides in pertinent part that the Agency allocate "[a]ny ERC allowances not allocated pursuant to subsections (f)(2)(A) or (B) of this Section, for reductions made in the control period in 2003."

Section 217.770 also provides in pertinent part at subparagraph (e) that:

In the event the date for implementing the NO<sub>x</sub> SIP Call, May 31, 2004, is delayed, the early reduction request must be submitted in accordance with any rulemaking or guidance by USEPA on the distribution of the Compliance

Supplement Pool under the NO<sub>x</sub> SIP Call (63 Fed. Reg. 57,356). 35 Ill. Adm. Code 217.770(e).

Together these rules provide the flexibility needed to maximize the availability of ERCs if implementation of the NO<sub>x</sub> Trading Program is further delayed or complicated due to the NO<sub>x</sub> SIP Call litigation.

The Board will not interpret Section 271.770 of Subpart W. This is not the correct rulemaking for the Board to interpret the NO<sub>x</sub> Trading Program rules. Even so, the record before us is not sufficient for the Board to do so. Dominion Generation advocates that a source should be allowed to qualify for ERCs for that portion of equivalent tonnage reduction below 0.25 lbs/mmbtu rate that is also 30% below its Title IV or other applicable permit level at the time the Subpart W rule was adopted. The Agency on the other hand believes that the source must reduce its emissions 30% below the 0.25 lbs/mmbtu emission limit to generate ERCs in 2003. The Board finds nothing in the record to clearly support either interpretation of Section 217.770.

In addition, the additional ERCs anticipated in 2003 may not materialize if the USEPA acts promptly this year to approve the NO<sub>x</sub> Trading Program. Finally, should USEPA fail to act this Spring, it may provide the guidance for adjusting the ERC distribution program due to the delayed implementation date as anticipated at Section 217.770(e) of Subpart W, quoted above.

### TECHNICAL AND ECONOMIC CONSIDERATIONS

Section 27(a) of the Act requires that in promulgating regulations, the Board “shall take into account . . . the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.” 415 ILCS 5/27(a) (1998). Based on the NO<sub>x</sub> SIP Call and supporting documents, the Agency determined that the control techniques required for EGUs to comply with the 0.25 lbs/mmbtu emission limit are technically feasible and economically reasonable.<sup>9</sup> See Exh. 1; Tr.1 at 71-78.

---

<sup>9</sup> See 63 Fed. Reg. 57,356, 399-402, 412-414, 456-458 (Oct. 27, 1998). See generally Alternative Control Techniques Document B NO<sub>x</sub> Emissions from Utility Boilers, EPA-453/R-94-023, March 1994, USEPA, OAQPS, Research Triangle Park, NC 27711; Alternative Control Techniques Document B NO<sub>x</sub> Emissions from Stationary Gas Turbines, EPA-43/R-91-007, January 1993, USEPA, OAQPS, Research Triangle park, NC 27711; Regulatory Impact Analysis for NO<sub>x</sub> SIP Call, FIP and Section 126 Petitions, Volume 1: Costs and Economic Impacts, EPA-452/R-98-003, September 1998, USEPA, Office of Air and Radiation, Washington, D.C. 20460; Electric Power Generation Cost Analysis for Compliance with EPA’s Final Rule Regional NO<sub>x</sub> Emission Reductions for 2003, prepared for USDOE, Federal Energy Technology Center; Development of Emissions Budget Inventories for Regional Transport NO<sub>x</sub> SIP Call Technical Amendment Version, A-96-56:X-B-11 USEPA/OAQPS, December 1999; and Technical Support Document for Control of Nitrogen Oxide Emissions in Electrical Power Generation, AQPSTR 00-3, October 2000.

The Agency based its analysis of the cost impact of complying with the proposed rules on USEPA's Alternative Control Techniques document (ACT). In the ACT, USEPA presents three measures of cost of NO<sub>x</sub> control: total capital costs, total annual costs, and cost effectiveness. Tr.1 at 66-67. The total capital cost is the sum of the cost of purchased equipment, direct installation, indirect installation, and contingencies. Annual costs are composed of the direct operating costs of materials and labor for maintenance, operation cost, costs of utilities, material replacement, disposal costs, and indirect operating charges. Cost effectiveness for each control technique is calculated by dividing the total annual cost by the annual tons of NO<sub>x</sub> removed. See footnote 9.

To determine cost effectiveness, the Agency used information generated by USEPA based on a NO<sub>x</sub> control level of 0.15 lbs/mmbtu. Tr.1 at 77. The Agency estimates that the cost effectiveness to comply with a 0.25 lbs/mmbtu NO<sub>x</sub> emission rate with no cap and trading program to be \$1,465 (1990 dollars) per ton of NO<sub>x</sub> removed in the 2003 control period. Tr.1 at 78.

Ameren Corporation cautioned the Board to "not lose sight of the tremendous costs [the proposal] will impose on the regulated community." PC 4 at 2. The Board recognizes the financial burden this proposal places on owners and operators of large EGUs subject to the proposal, but feels that the cost effectiveness of \$1,465 per ton of NO<sub>x</sub> removed is reasonable given the importance of reducing NO<sub>x</sub> emissions during the ozone control season. The Board notes that the cost effectiveness of NO<sub>x</sub> control for large EGUs is similar to the cost effectiveness of various other air control measures adopted by the Board pursuant to the CAAA. In addition, the Board finds that technically feasible control technologies are available for reducing NO<sub>x</sub> emissions from large EGUs. In sum, the Board finds that the proposed regulations for reducing NO<sub>x</sub> emissions from large EGUs are technically feasible and economically reasonable.

### CONCLUSION

Pursuant to federal law and other obligations of the State of Illinois, large EGUs in Illinois are required to significantly reduce emissions of NO<sub>x</sub> during the ozone control season. More specifically in this rulemaking, the State is required to adopt a SIP that will demonstrate attainment in the Metro-East NAA for ozone. This must be achieved by reducing NO<sub>x</sub> emissions from large EGUs during the ozone control period beginning in 2003. These rules are premised upon an emission rate based limitation of 0.25 lbs/mmbtu and are applicable statewide. Both elements are supported by the modeling performed by the Agency, and its commitments in judicial proceedings and its response to USEPA NO<sub>x</sub> SIP Call and USEPA's Extension Policy. With this proposed rulemaking, those obligations are satisfied in a method that is equitable and economical.

The Board acknowledges and appreciates the extensive effort undertaken by both the Agency and members of the regulated community throughout this rulemaking. The Board also

appreciates the Agency's final comment about the State's obligations under the NO<sub>x</sub> SIP Call and its attainment demonstration obligations for the Metro-East NAA. In conclusion, the Board finds that this rate-based emission limitation rule and the program for implementing it, as now modified, address the needs of the State and the regulated community. Accordingly, we adopt for second notice the following order.

### ORDER

The Board hereby proposes for second notice the following amendments to 35 Ill. Adm. Code 217. The Clerk of the Board is directed to file these proposed rules with the Joint Committee on Administrative Rules.

#### TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE B: AIR POLLUTION CHAPTER I: POLLUTION CONTROL BOARD

#### SUBCHAPTER c : EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

#### PART 217 NITROGEN OXIDES EMISSIONS

#### SUBPART A: GENERAL PROVISIONS

Section	
217.100	Scope and Organization
217.101	Measurement Methods
217.102	Abbreviations and Units
217.103	Definitions
217.104	Incorporations by Reference

#### SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section	
217.121	New Emission Sources

#### SUBPART C: EXISTING FUEL COMBUSTION EMISSION SOURCES

Section	
217.141	Existing Emission Sources in Major Metropolitan Areas

#### SUBPART K: PROCESS EMISSION SOURCES

Section	
217.301	Industrial Processes

#### SUBPART O: CHEMICAL MANUFACTURE

Section	
217.381	Nitric Acid Manufacturing Processes

## SUBPART V: ELECTRIC POWER GENERATION

Section	
217.521	Lake of Egypt Power Plant
<u>217.700</u>	<u>Purpose</u>
<u>217.702</u>	<u>Severability</u>
<u>217.704</u>	<u>Applicability</u>
<u>217.706</u>	<u>Emission Limitations</u>
<u>217.708</u>	<u>NO<sub>x</sub> Averaging</u>
<u>217.710</u>	<u>Monitoring</u>
<u>217.712</u>	<u>Reporting and Recordkeeping</u>

SUBPART W: NO<sub>x</sub> TRADING PROGRAM FOR ELECTRICAL GENERATING UNITS

Section	
217.750	Purpose
217.752	Severability
217.754	Applicability
217.756	Compliance Requirements
217.758	Permitting Requirements
217.760	NO <sub>x</sub> Trading Budget
217.762	Methodology for Calculating NO <sub>x</sub> Allocations for Budget Electrical Generating Units (EGUs)
217.764	NO <sub>x</sub> Allocations for Budget EGUs
217.768	New Source Set-Asides for “New” Budget EGUs
217.770	Early Reduction Credits for Budget EGUs
217.774	Opt-In Units
217.776	Opt-In Process
217.778	Budget Opt-In Units: Withdrawal from NO <sub>x</sub> Trading Program
217.780	Opt-In Units: Change in Regulatory Status
217.782	Allowance Allocations to Budget Opt-In Units

Appendix A	Rule into Section Table
Appendix B	Section into Rule Table
Appendix C	Compliance Dates
Appendix D	Non-Electrical Generating Units
Appendix F	Allowances for Electrical Generating Units

Authority: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28.5].

Source: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9, 25 Ill. Reg.

128, effective December 26, 2000; amended in R01-16, 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART V: ELECTRIC POWER GENERATION

### Section 217.700      Purpose

The purpose of this Subpart is to control the emissions of nitrogen oxides (NO<sub>x</sub>) from electrical generating units (EGUs) during the ozone control period (for purposes of Subpart V, the ozone control period is May 1 through September 30 of each year, beginning in 2003), by limiting the emissions of NO<sub>x</sub> from EGUs to no more than 0.25 lbs/mmbtu of actual heat input during each ozone control period.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 217.702      Severability

If any section, subsection or clause of this Subpart is found invalid, such finding shall not affect the validity of this Subpart as a whole or any Section, subsection or clause not found invalid.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 217.704      Applicability

The following fossil fuel-fired stationary boilers, combustion turbines or combined cycle systems are electrical generating units (EGUs) and shall be subject to this Subpart on and after May 1, 2003:

- a) Any unit serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, excluding those units listed in Appendix D of this Part and any new unit at a source listed in Appendix D of this Part.
- b) Any unit with a maximum design heat input that is greater than 250 mmbtu/hr that commences operation on or after January 1, 1999, serving at any time a generator that has a nameplate capacity of 25 MWe or less and has the potential to use more than 50% of the potential electrical output capacity of the unit. Fifty percent (50%) of a unit's potential electrical output capacity shall be determined by multiplying the unit's maximum design heat input by 0.0488 MWe/mmbtu. If the size of the generator is greater than this calculated number, the unit is an EGU subject to the provisions of this Subpart.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 217.706      Emission Limitations

- a) On or after May 1, 2003, no owner or operator subject to this Subpart shall cause or allow the emissions of NO<sub>x</sub> into the atmosphere from any EGU to exceed 0.25 lbs/mmbtu of actual heat input during each ozone control period, based on a control period average for that unit.
- b) Notwithstanding the emission limitation in subsection (a) of this Section, any EGU subject to a more stringent NO<sub>x</sub> emission limitation pursuant to any State or federal statute, including the Act, the Clean Air Act, or any regulations promulgated thereunder, shall comply with both the requirements of this Subpart and that more stringent emission limitation.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 217.708      NO<sub>x</sub> Averaging

- a) Notwithstanding Section 217.706(a) of this Subpart, the owners or operators of EGUs listed in Appendix F of this Part and the owner or operator of Soyland Power may elect to demonstrate compliance with this Subpart by averaging for the ozone control period the NO<sub>x</sub> emission rates with any EGU listed in Appendix F or any EGU at Soyland Power's Alsey Illinois facility that commenced commercial operation on or before January 1, 2000.
- b) The average NO<sub>x</sub> emission rate for all EGUs being averaged pursuant to this Section must not exceed 0.25 lb /mmbtu and shall be determined as follows:

$$\text{ER}_{\text{avg}} = \frac{\sum_{i=1}^n (HI_i \times ER_i)}{\sum_{i=1}^n HI_i}$$

Where:

ER<sub>avg</sub>      =      average emission rate in lbs/mmbtu of all EGUs in averaging demonstration

HI<sub>i</sub>      =      heat input for the ozone control period of EGU i, mmbtu, as specified in the NO<sub>x</sub> averaging demonstration

$$\frac{ER_i}{n} = \frac{\text{actual NO}_x \text{ emission rate of EGU } i, \text{ lbs/mmbtu, as specified in the NO}_x \text{ averaging demonstration}}{\text{number of EGUs that are averaging}}$$

- c) Averaging under this Subpart must be authorized through federally enforceable permit conditions for such EGU.
- d) An EGU may be included in only one NO<sub>x</sub> averaging demonstration during an ozone control period.
- e) Compliance by averaging for each ozone control period must be demonstrated by November 30 following each ozone control period.
- f) If averaging is used to demonstrate compliance with this Subpart, the effect of a failure to demonstrate such compliance shall be that the compliance status of each EGU shall be determined pursuant to Section 217.706(a) as if the NO<sub>x</sub> emission rates of such EGUs were not averaged.
- g) The owner or operator of any EGU that elects to participate in an averaging demonstration to demonstrate compliance with this Subpart cannot average with any other EGU for which the owner or operator of such EGU does not maintain the required records, data, and reports, or does not submit copies of such records, data, or reports to the Agency upon request.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 217.710      Monitoring

- a) The owner or operator of an EGU subject to this Subpart shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for NO<sub>x</sub> that meet the requirements of 40 CFR 75, subpart B.
- b) Notwithstanding subsection (a), the owner or operator of a gas-fired peaking unit or oil-fired peaking unit as defined in 40 CFR 72.2 may determine NO<sub>x</sub> emissions in accordance with the emissions estimation protocol of 40 CFR 75, subpart E.
- c) Notwithstanding subsection (a), the owner or operator of a combustion turbine that operates less than 350 hour per ozone control period may determine the heat input and NO<sub>x</sub> emissions of the turbine as follows:

- 1) Heat input shall be determined from the metered fuel usage to the turbine or the calculated heat input determined as the product of the turbine's maximum hourly heat input and hours of operation as recorded by operating instrumentation on the turbine;
- 2) NO<sub>x</sub> emissions shall be determined as the product of the heat input, as determined above, and the appropriate default NO<sub>x</sub> emission factor(s) below:

0.7 lbs/mmbtu - Natural gas

1.2 lbs/mmbtu - Fuel oil

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 217.712      Reporting and Recordkeeping

The owner or operator of an EGU subject to the requirements of this Subpart shall:

- a) Comply with the recordkeeping and reporting requirements of 40 CFR 75 applicable to NO<sub>x</sub> emissions during the ozone control period, including, but not limited to, 40 CFR 75.54(b) and (d), incorporated by reference in Section 217.104 of this Part.
- b) Notwithstanding subsection (a), the owner or operator of a combustion turbine for which heat input and NO<sub>x</sub> emissions are determined pursuant to Subsection 217.710(c) of this Subpart shall comply with the following recordkeeping and reporting requirements:
  - 1) Maintain records of the heat input and NO<sub>x</sub> emissions of the turbine as determined in accordance with Section 217.710(c) of this Subpart, and records of metered fuel use or operating hours used to determine heat input; and
  - 2) Annually report the heat input and NO<sub>x</sub> emissions of the turbine as determined in accordance with Section 217.710(c) of this Subpart, for each ozone control period by November 30 of each year.
- c) Submit, with the report required under subsection (b) of this Section, the following certification statement, to be signed by a responsible official:

"I certify under penalty of law that this report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief after due inquiry, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Signature

Name

Official Title

Telephone No.

Date Signed

- d) If demonstrating compliance through Section 217.706(a) of this Subpart, by November 30 of each year beginning in 2003, submit to the Agency a report that demonstrates each EGU has not exceeded a NO<sub>x</sub> emission rate of 0.25 lbs/mmbtu during the ozone control period.
- e) If demonstrating compliance through Section 217.708 of this Subpart, by November 30 of each year beginning in 2003, submit to the Agency a report that demonstrates the following:
- 1) For all EGUs participating in the averaging demonstration, the averaged control period NO<sub>x</sub> emission rate pursuant to the equation in Section 217.708(b) of this Subpart;
  - 2) The average ozone control period NO<sub>x</sub> emission rate of each EGU participating in the averaging demonstration; and
  - 3) The information required to determine the average NO<sub>x</sub> emission rate pursuant to Section 217.708(b) of this Subpart.
- f) Keep and maintain, for five years, all records and data necessary to demonstrate compliance with the requirements of this Subpart, and upon request shall make such records and data available to Agency and USEPA representatives for inspection and copying during working hours; and
- g) Submit copies of any records and data required by this Section to the Agency within 30 days after receipt of a written request by the Agency.

(Source: Added at 25 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 15th day of February 2001 by a vote of 7-0.

Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board