

Statement of Basis

For a Planned Significant Modification of the
Clean Air Act Permit Program (CAAPP) Permit
for:

Ameren Energy Generating Company
Coffeen Energy Center

Source ID No.: 135803AAA
Permit No.: 95090009

Date Prepared: September 24, 2012

Permitting Authority:
Illinois EPA
Bureau of Air, Permit Section
217/785-1705

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PREFACE

The purpose of this Statement of Basis is to discuss the development and legal basis for the planned significant modification of the Clean Air Act Permit Program (CAAPP)¹ permit for the Coffeen Energy Center, a coal-fired power plant located near Coffeen, Illinois. This planned action would make certain revisions to the CAAPP permit for this source. These revisions arise from the settlement of the permit appeal currently pending before the Illinois Pollution Control Board for the CAAPP permit that was initially issued by the Illinois EPA for this source.

A Statement of Basis is a document that the Illinois EPA must prepare as part of the public comment period for the planned issuance, renewal or significant modification of a CAAPP permit. Statements of Basis are intended to aid the public in understanding the relevant facts and legal underpinnings of planned actions on CAAPP permits and the draft CAAPP permits that have been prepared by the Illinois EPA.² In this instance, this Statement of Basis addresses the significant modification of the CAAPP permit for the Coffeen Energy Center that is planned by the Illinois EPA.

This Statement of Basis is only explanatory in nature. It is not enforceable as either policy or guidance. The Statement of Basis also does not shield the source from enforcement actions or its responsibility to comply with existing or future applicable regulations. Nor does this Statement of Basis constitute a defense to a violation of the federal Clean Air Act, the Environmental Protection Act or implementing regulations thereunder.

¹ The Clean Air Act Permit Program (CAAPP) is Illinois' operating permit program for sources of emissions pursuant to Title V of the federal Clean Air Act.

² The Illinois EPA must prepare Statements of Basis pursuant to Section 39.5(8)(b) of Illinois' Environmental Protection Act (Act). Along with the draft permit prepared for a public comment period, the Illinois EPA must prepare "... a statement that sets forth the legal and factual basis for the Draft CAAPP permit conditions, including references to the applicable statutory or regulatory provisions." The Illinois EPA must also provide a copy of this statement to any person who requests it.

INTRODUCTION

The Clean Air Act Permit Program (CAAPP) is the operating permit program established in Illinois for stationary sources of emissions that is required by Title V of the federal Clean Air Act. Title V permits are a means of assembling and setting forth the various air pollution control requirements established under the Clean Air Act for major sources of emissions and certain other sources in particular categories. Illinois' CAAPP has been approved by USEPA as meeting the requirements for a Title V permit program. The CAAPP is administered by the Illinois EPA in conjunction with other state permitting programs for stationary sources of emissions. CAAPP permits contain conditions identifying the federal and state emission control requirements that apply to the various emission units at sources. They also contain detailed conditions establishing "monitoring," including operating practices, emission testing, emissions monitoring, operational monitoring, recordkeeping and reporting, that subject sources must implement to confirm they are operating in compliance with applicable emission control requirements.

The initial CAAPP permit for the Coffeen Energy Center was issued by the Illinois EPA in September 2005. The permit addressed the applicable emission standards and requirements existing at the time the permit was issued. In a subsequent permit appeal to the Illinois Pollution Control Board, Ameren challenged the applicability of certain legal requirements and the imposition of certain requirements for monitoring in the CAAPP permit. In the years since the filing of the appeal, the issued permit has been stayed in its entirety. The presence of the stay, which was a consequence of the Illinois' administrative review process, has prevented the issued permit from becoming effective. In addition, the stay has acted to prevent the renewal and revision of the CAAPP permit for the Coffeen Energy Center, which would have enabled the CAAPP permit for this source to appropriately address new rules and other relevant developments. The initial steps to advancing the development of an appropriate CAAPP permit for this source is to provide for the effectiveness of a CAAPP permit and the resolution of the permit appeal. The CAAPP permit for the source can and must then be brought up-to-date by the Illinois EPA through permit reopening and, as needed, additional permit revisions.

This Statement of Basis supports a significant modification of the CAAPP permit for the Coffeen Energy Center planned by the Illinois EPA that would make certain revisions to the CAAPP permit initially issued for this source that arise from the settlement of the permit appeal currently pending before the Illinois Pollution Control Board. Chapter I of this Statement of Basis provides historical background to the planned permitting action. It also discusses the legal framework for resolving permit appeals in Illinois, including the typical means for resolving permit appeals and the selected means of resolving the Ameren appeal using the permit modification procedures under the CAAPP. In addition, other permitting actions that will occur as part of the settlement of the appeal are discussed. Chapter II provides the factual basis for the planned permit action. Chapter III provides a narrative discussion for the specific changes that are planned to the CAAPP permit in this permitting action, which would be made using the procedures for significant modification of CAAPP permits. Chapter IV provides supplemental information, including general discussions of the factual basis for the CAAPP permit that was initially issued to the source and background information relative to CAAPP permits.

CHAPTER I – HISTORICAL AND LEGAL BACKGROUND TO THE PLANNED ACTION

1.1 Historical Background

Ameren Energy Generating Company (Ameren) owns and operates a coal-fired power plant for the generation of electricity known as the Coffeen Energy Center. This plant has a nominal capacity of about 950 megawatts of electricity. It is located at 134 CIPS Lane, Coffeen, Montgomery County, Illinois. It has two coal-fired boilers, Boiler CB1 (nominal capacity of 3,282 mmBtu/hr), and Boiler CB2 (nominal capacity of 5,544 mmBtu/hr), along with ancillary equipment and operations, including an auxiliary boiler, coal handling, coal processing, fly ash handling equipment and gasoline storage.

Ameren filed an application with the Illinois EPA on September 1, 1995 for a CAAPP Permit for the Coffeen Energy Center. The application was assigned Application No. 95090009.³ Following a public comment period that included a public hearing, opportunity for supplemental comments from the public and review of proposed CAAPP permits by USEPA, the Illinois EPA issued a CAAPP permit for this source on September 29, 2005.⁴

On November 3, 2005, Ameren petitioned Illinois' Pollution Control Board (Board) for review of the CAAPP permit issued by the Illinois EPA. In particular, Ameren challenged the inclusion of certain specific terms and conditions in this permit, as identified in the petition. Ameren requested that the Board reverse and remand the permit to the Illinois EPA specifically for the purpose of removing said conditions or revising the permit as requested in the petition. Ameren further requested that the Board recognize that the "issued" CAAPP Permit was not final and effective, pending a final decision from the Board, with issuance of an order staying the permit as a whole. On February 16, 2006, the Board accepted Ameren's appeal petition and granted an administrative stay of the issued CAAPP permit in its entirety.

The Illinois EPA and Ameren have been working to settle the appeal of the CAAPP permit. On September 14, 2012, the Illinois EPA and Ameren jointly filed a motion with the Pollution Control Board requesting that the administrative stay of the CAAPP permit be lifted for the "uncontested" conditions of the permit, while the remaining conditions contested in the appeal remain stayed. The motion also included a request for remand of the original CAAPP permit to the Illinois EPA so that the permit could be dated to reflect a full five-year term of duration, as required under the CAAPP. On September 20, 2012, the Board issued an order granting the relief sought by the parties. At this time, the Board's stay remains in place for the contested conditions of the CAAPP permit.

1.2 Resolution of Permit Appeal using CAAPP Procedures for Permit Revisions

As previously discussed, the planned permitting action would make certain revisions to the CAAPP permit arising from the resolution of Ameren's administrative permit appeal. Although the appeal and the resulting stay of the CAAPP permit remain pending, the Illinois EPA and Ameren have recently concluded negotiations that will resolve the various appeal points. Under the framework of the Environmental Protection Act, administrative appeals are typically resolved through negotiated settlements, with revised permits being

³ The Source Identification (ID) Number historically assigned to the Coffeen Energy Center by the Illinois EPA is 135803AAA.

⁴ The expiration date specified on the face of the CAAPP permit was September 29, 2010, providing the permit with a five-year term from the date that the permit was issued.

issued by the Illinois EPA that memorialize the outcome of the negotiated settlement process. While it is possible for permit appeals to be resolved through actual litigation before the Board, with the possibility of subsequent review at the appellate court level thereafter, it is unusual for permit appeals to be resolved in this manner for a variety of reasons. In practice, resolution of permit appeals by litigation is an infrequent occurrence, except when the Illinois EPA and the permit applicant cannot come to a negotiated settlement.

Under the CAAPP, there are two approaches that the Illinois EPA could pursue to effect a resolution of the pending appeal of the CAAPP permit for the Coffeen Energy Center. The first approach would involve complete reissuance of an initial CAAPP permit for this source, based on a new permit application from Ameren. The second approach, rather than starting the permitting process anew, would address the various contested conditions in the issued CAAPP permit using the established procedures under the CAAPP for revision of permits.

The administrative review process for appeal of CAAPP permits is subject to established legal principles and precedents in Illinois relating to both environmental permitting and administrative law. Key among these principles is that the Illinois EPA cannot unilaterally reconsider its permit decisions. When a permit action has been appealed to the Pollution Control Board, the Board acts as the final decision-maker in adjudicating the appeal of the permit issued by the Illinois EPA. The Illinois EPA cannot, on its own initiative, act to resolve a permit appeal. Thus, when permit appeals are resolved through settlement, such settlements are made possible because the sources authorize the Illinois EPA to act anew in revised permits.

In this instance, the first approach, reissuance of an initial CAAPP permit, is not feasible, because Ameren has declined to allow the Illinois EPA to act on an application for reissuance of an initial CAAPP permit. Moreover, reissuance of the initial permit would also require a comprehensive permit review and accompanying public comment period and USEPA review concerning the same. For the uncontested conditions in the issued permit, the mechanics of this process would necessitate a second review and a repetition of the procedures used for the initial issuance of the CAAPP permit. In view of such scope, a reissuance of an initial CAAPP permit would result in redundancy for a large component of the permit, both in terms of its substantive review and process.

It is also significant that this approach would further delay the effectiveness a CAAPP permit for the Coffeen Energy Center and the resolution of the appeal. Both the petition for appeal and administrative stay would likely remain in place until the completion of permit reissuance. When the number of appealed CAAPP permits for coal-fired power plants in Illinois is considered, the reissuance of CAAPP permits for all of these plants would almost certainly extend the current *status quo* for these plants for many years to come.

The second approach to the resolution of the appeal of the CAAPP permit for the Coffeen Energy Center, which the Illinois EPA has opted to pursue, involves making revisions to the issued CAAPP permit to achieve a settlement of the appeal. The contested conditions in the issued CAAPP permit will thus be addressed using the various procedures under the CAAPP for revisions of permits, rather than starting permitting anew. As already discussed, the initial step in this approach involves having the uncontested conditions of the issued CAAPP permit, comprising the greater part of the permit, take effect. Then, the issued CAAPP permit will be up-dated using the various procedures of the CAAPP for revisions to permits, beginning with the conditions contested in

the appeal, and then later, with a permit reopening to address additional rules and requirements that have become applicable to the source since 2005. Although this approach involves three discrete phases, this approach avoids the difficulties of permit reissuance, maintaining continuity with the CAAPP permit that was initially issued and the underlying permit application. More significantly, the Coffeen Energy Center will become subject to an effective CAAPP permit much more quickly.

1.3 Three-phased Implementation

As related to the Clean Air Act Permit Program (CAAPP), as discussed above, the overall goal is to have the Coffeen Energy Center addressed by and subject to an appropriate CAAPP permit. The first step to achieving this goal was to have the scope of the Pollution Control Board's administrative stay modified so that the uncontested conditions of the issued CAAPP permit become effective. As previously mentioned, on September 20, 2012, the Board recently issued an order lifting the stay of the uncontested conditions of the issued CAAPP permit. In accordance with the terms of the Board's order, the initial CAAPP permit took effect on September 20, 2012, beginning the five-year term of the permit. The source therefore now possesses and is subject an effective initial CAAPP permit. This has opened the way for subsequent revisions of the CAAPP permit for the Coffeen Energy Center.

However, the administrative stay currently is still in place for the contested conditions of the CAAPP permit. The next step to having this source subject to an appropriate CAAPP permit is to resolve the points of contention raised in the permit appeal. This requires that the conditions that Ameren challenged in its petition before the Board be addressed. This can be accomplished using the CAAPP's procedures, as applicable, for administrative amendments, minor modifications and significant modification of CAAPP permits to appropriately revise the contested conditions of the issued CAAPP permit consistent with the terms of the parties' settlement. As already discussed, this Statement of Basis supports the planned permitting action for certain contested conditions of the CAAPP permit that would be accomplished using the significant modification procedures of the CAAPP.

Overlapping with permitting revisions arising from settlement of the appeal, the Illinois EPA will initiate a formal reopening of the CAAPP permit under the CAAPP's procedures for reopening proceeding. This third step will add additional requirements to the CAAPP permit, i.e., requirements under the Clean Air Act that have become applicable to the source since the original permit issuance in 2005, as authorized by Section 39.5(15)(a)(i) of the Act. At this time, the following additional requirements have been identified as needing to be addressed in the reopening proceeding: the Mercury and Air Toxics Standards [77 FR 9304-9513 (February 16, 2012)]; the Clean Air Interstate Rule [76 FR 70093 (May 12, 2005)]; and the terms and conditions of construction permits issued under permit programs under Title I of the Clean Air Act. The Illinois EPA intends to begin the formal process of permit reopening within a few days of issuance of this draft significant modification by providing Ameren notice of the planned reopening of the CAAPP permit, in accordance with Section 39.5(15)(d) of the Act.

1.4 The Current Permitting Action

Settlement negotiations have recently produced a final agreement as to the numerous appeal points that presently form the basis for revisions to the CAAPP permit. For this reason, the Illinois EPA is now proceeding with public notice

of this draft permit, which reflects those changes to the CAAPP permit from the settlement that are being implemented through the procedures for significant modification. The timing of this action also reflects a recent commitment by the Illinois EPA to seek an expeditious resolution of the pending CAAPP appeals in general and, with respect to the Coffeen Plant, to avoid an objection to the CAAPP permit or other possible administrative action by USEPA.

The permit revisions addressed by this permitting action are those deemed to warrant review as significant modifications under Section 39.5(14)(c) of the Act. These revisions, which are described in detail in Chapter II below, primarily involve the applicability of certain legal requirements and reasonable changes to periodic monitoring requirements. As provided by the Act, the CAAPP's procedures for significant modification must be used "for applications requesting significant modifications and for those applications that do not qualify as either minor modifications or as administrative permit amendments". As relevant here, a permit modification that purports to be a "significant change in existing monitoring" or a "relaxation of reporting or recordkeeping requirements" is considered "significant". Sections 39.5(14)(c)(i) and (ii) of the Act.⁵

In addition to appeal resolution, and as a consequence of implementing a significant modification to the CAAPP permit, the Illinois EPA is addressing the federal rule for Compliance Assurance Monitoring (CAM), 40 CFR Part 64. In this instance, the CAM rule is not being triggered as a result of CAAPP's procedures for permit revision but, rather, by the independent, federal law requirements of the CAM rule governing large pollutant-specific emission units. 40 CFR 64.5(a)(2). For purposes of addressing CAM in this permitting action, it is recognized that Ameren is subject to the applicability requirements of 40 CFR 64.2(a) and, by virtue of such applicability, has provided information to the Illinois EPA to meet the submittal requirements of 40 CFR 64.4. Ameren's submittal includes an implementation plan and schedule to allow for unit-specific emissions testing that will be completed prior to beginning operation of the proposed monitoring. This draft Significant Modification of the CAAPP permit acts to approve Ameren's submittal, conditioned upon the collection of data from the testing that will confirm the ability of the monitoring to provide data sufficient to meet CAM's requirements and/or confirm the appropriateness of an indicator range(s) or designated condition(s) to satisfy 40 CFR 64.3(a)(2) and (3).

The Illinois EPA also plans to introduce a condition to the CAAPP permit in this permitting action to address the informational requirements related to the planned permit reopening. In recent correspondence from USEPA involving the Coffeen Energy Center, a concern was expressed that the Illinois EPA's intent to invoke the reopening procedures of the CAAPP lacks a sufficiently enforceable commitment.⁶ To avoid either a permit objection or other possible administrative action by USEPA in this matter, the CAAPP permit will now require Ameren to submit information identifying the additional Clean Air Act requirements that have become applicable to the Coffeen Energy Center since

⁵ Settlement negotiations between the Illinois EPA and Ameren initially focused on achieving settlement of the appeal based on permit revisions made solely through the procedures for administrative amendment and minor modification. However, the Illinois EPA, in close consultation with USEPA, subsequently determined that a number of issues raised in the appeal, affecting a larger number of conditions or parts thereof, appear to constitute significant changes and/or a relaxation of certain reporting or recordkeeping requirements. For this reason, the Illinois EPA has deemed it appropriate to require the affected revisions to be made using the CAAPP's procedures for significant modification of permits.

⁶ In fact, the Illinois EPA considers the reopening provision to constitute an unambiguous statutory duty on the part of the Illinois EPA that is fully enforceable under the CAAPP.

2005, as well as information relating to any such requirement for which the source does not currently comply.

As a planned significant modification to a CAAPP permit, the planned permitting action is subject to requirements for public participation and a 45-day review by USEPA in accordance with Sections 39.5(8)(a) and (9) of the Act. The opportunity for comment has been extended to the public and, consistent with the public notice, written comments on the draft Significant Modification of the CAAPP permit will be accepted beginning on September 25, 2012 until the close of the record, which is currently scheduled for December 17, 2012, unless a later date is provided by the Illinois EPA's hearing officer. For this permitting action, which is the first in line of existing CAAPP appeals for coal-fired power plants to be addressed through negotiated settlement leading to permit revisions, the Illinois EPA elected to hold a public hearing. The hearing will be held on November 15, 2012, at 7:00 pm at the East Fork Township building, 500 S. Prospect St. in Coffeen.

It is Illinois EPA's preliminary determination that the planned permit action meets the standards for issuance of a "Significant Modification" of the CAAPP Permit as set forth in Section 39.5(10)(a) of the Act (see Section 1.7 of this document). The Illinois EPA has therefore initiated the process for a Significant Modification of the CAAPP Permit.

The Illinois EPA has prepared a Draft Significant Modification of the CAAPP permit and this Statement of Basis.⁷ The draft permit is accompanied by a "tracked changes" or redlined version of the permit reflecting the negotiated changes to the original text of the initial CAAPP permit. It should be noted that the both the draft and redlined versions of the permit also contain changes to provisions that are unrelated to the significant modification changes that are the subject of this planned permit action. The additional text in these documents represents the other changes to the CAAPP permit that would be made by administrative amendment and minor modification in parallel permitting actions, as discussed below. The form of these documents allows interested persons to view the cumulative changes to the CAAPP permit resulting from the negotiated settlement of the permit appeal. In this regard, the form of the documents is an outgrowth of negotiations that addressed revisions to the permit in relation to the appeal, rather than the procedures that would be eventually be used in making the revisions. The presentation avoids the administrative difficulties associated with creating discrete text for the separate permitting actions.

1.5 Parallel Permitting Actions

In addition to this permitting action for a significant modification of the CAAPP permit, the Illinois EPA is planning, in the near future, to implement certain negotiated revisions to the CAAPP permit through the procedures for administrative amendment. Specifically, the changes that are being addressed through these procedures involve typographical corrections, minor administrative changes and/or more frequent monitoring or reporting, as authorized by Section 39.5(13)(c)(i), (ii) and (iii) of the Act, respectively. For permit revisions meeting the criteria for administrative amendment, the Illinois EPA is required to address the revisions using the procedures for administrative amendment of CAAPP permits. The revisions that will be made to

⁷ The draft Significant Modification of the CAAPP permit and this Statement of Basis have been posted on and are available at USEPA's website: <http://www.epa.gov/reg5oair/permits/ilonline.html>

the CAAPP permit using the procedures for administrative amendment are described in an ancillary document to this Statement of Basis. (Attachment 1). The CAAPP does not provide for notice or opportunity for comment on administrative amendments. A copy of the amended permit will be submitted to the USEPA following revision, as required by Section 39.5(13)(b) of the Act.

In the near future, the Illinois EPA will also proceed with certain negotiated revisions to the CAAPP permit through the CAAPP's procedures for minor modification of permits. The revisions that will be addressed using these procedures involve a variety of changes, including, among other things, those that do not cause significant changes to existing monitoring, reporting or recordkeeping, as provided for by Section 39.5(14)(a)(i)(B) of the Act. For permit revisions meeting the criteria for minor modification, the Illinois EPA is required to review the revisions using the CAAPP's procedures for minor modifications. The revisions that will be made using the minor modification process are described in an ancillary document to this Statement of Basis. (Attachment 2). The CAAPP does not provide for public notice or opportunity for comment for minor modifications of permits. USEPA will be afforded a 45-day review period to comment on the proposed modifications, as provided for by Section 39.5(14)(a)(v) of the Act.

1.6 Legal Basis for the CAAPP Program

The statutory authority for Illinois's state operating permit program for sources of emissions established to meet the requirements of Title V of the federal Clean Air Act and 40 CFR Part 70 is found at Section 39.5 of the Environmental Protection Act (Act) [415 ILCS 5/39.5]. The program is called the Clean Air Act Permitting Program (CAAPP). The CAAPP was given final full approval by USEPA on December 4, 2001 (see 66 FR 62946).

1.7 Legal Basis for Issuance of Revised CAAPP Permit

In accordance with Section 39.5(10)(a) of the Act, the Illinois EPA possesses a statutory duty to issue a CAAPP permit, including a significant modification of a CAAPP permit, if all of the following standards for issuance have been met:

- The applicant has submitted a complete and certified application for a permit, permit modification, or permit renewal consistent with Sections 39.5(5) and (14) of the Act, as applicable, and applicable regulations;
- The applicant has submitted with its complete application an approvable compliance plan, including a schedule for achieving compliance, consistent with Section 39.5(5) of the Act and applicable regulations;
- The applicant has timely paid the fees required pursuant to Section 39.5(18) of the Act and applicable regulations; and
- The applicant has provided any additional information as requested by the Illinois EPA.

These standards have been met. Ameren has submitted an appropriate application for a revised CAAPP permit, which includes the necessary certification for its truth and accuracy. Ameren submitted an approvable Compliance Plan as part of its initial permit application, in which it certified compliance with all applicable regulations. In addition, the issued CAAPP permit requires Ameren

to certify as to the source's compliance status on an annual basis.⁸ Ameren is current on payment of all fees under the CAAPP for the Coffeen Energy Center. As part of the processing of the subject application, the Illinois EPA has not requested any additional information from Ameren.

1.8 Legal Basis for Conditions in the CAAPP Permit

This source, the Coffeen Energy Center, is subject to a variety of federal and state emission standards and emission control requirements, which are the legal basis for the conditions in this CAAPP permit that limit emissions. Certain other requirements have their origin in preconstruction permits issued for new or modified emission units at a source.⁹ The CAAPP itself provides the legal basis for additional requirements such as periodic monitoring, reporting, and recordkeeping. The specific statutory and regulatory provisions that are the legal basis for the conditions in the CAAPP permit for this source are provided in the permit, as the origin and authority of conditions is also specified and referenced in the conditions of the permit. Conditions that have their origin in a preconstruction permit are also identified.¹⁰

⁸ Because the initial CAAPP permit was stayed, Ameren has not been required to submit reports, including annual compliance certifications, under the CAAPP. As a portion of the CAAPP permit is now in effect, with the lifting of the stay for uncontested conditions of the permit, Ameren must begin submitting reports required by the CAAPP. In this regard, the first quarterly report required by the CAAPP that Ameren will provide for the source will address operation during the fourth quarter of 2012.

⁹ Preconstruction permits, commonly referred to in Illinois as construction permits, derive from the New Source Review (NSR) permit programs required by Title I of the CAA. These NSR programs include the federal rules for Prevention of Significant Deterioration of Air Quality (PSD), 40 CFR 52.21, which the Illinois EPA administers for major projects in Illinois pursuant to a delegation agreement with USEPA. In areas that are or have been nonattainment, NSR also includes the state nonattainment NSR program, pursuant to state rules, Major Stationary Sources Construction and Modification (MSSCM), 35 IAC Part 203, which have been approved by USEPA as part of the State Implementation Plan for Illinois. The NSR program also encompasses state construction permit programs for projects that are not major.

¹⁰ In CAAPP permits, the Illinois EPA's practice is to identify requirements that are carried over from an earlier Title I permit into a new or renewed CAAPP Permit as "TI" conditions (i.e., Title I conditions). Title I Conditions that are revised as part of their incorporation into a CAAPP Permit are further designated as "TIR". Title I Conditions that are newly established through a CAAPP Permit are designated as "TIN". It is important that Title I Conditions be identified in a CAAPP Permit because these conditions will not expire when the CAAPP Permit expires. Because the underlying authority for Title I Conditions comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than being linked to Title V of the Act.

CHAPTER II - FACTUAL BASIS FOR THE PLANNED PERMIT ACTION

2.1 Description of the Source

At this source, i.e., the Coffeen Energy Center, Ameren operates two coal-fired boilers to generate electrical power. The source is located near Coffeen, a small rural city in Illinois. The area in which the source is located has not been identified as posing a potential concern for consideration of Environmental Justice.

SIC Code: 4911
County: Montgomery

The source contains the following emission units and operations:

<i>Emission Unit(s)</i>	<i>Description</i>
Coal-Fired Boiler CB1	Babcock & Wilcox Boiler Nominal 3,282 mmBtu/hr (1965)
Coal-Fired Boiler CB2	Babcock & Wilcox Boiler Nominal 5,544 mmBtu/hr (1972)
Coal Handling Equipment	Coal Receiving, Transfer and Storage Operations
Crusher House	Coal Crushing Operation
Fly Ash Equipment	Transfer System, Silo, and Loadout Operation
Boiler CB-AUX4	Auxiliary Boiler Nominal 226 mmBtu/hr (1992)
Storage Tank CGT-1	Gasoline Storage Tank 1000 Gallon Capacity

2.2 Ambient Air Quality Status for the Area

The source is located in an area that is currently designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (PM_{2.5}, PM₁₀, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), ozone and lead). (See 40 CFR Part 81, Designation of Areas for Air Quality Planning Purposes.)

2.3 Status of the Source under the CAAPP

The source requires a CAAPP permit because it is considered a major source for emissions of the following regulated pollutants: particulate matter (PM), nitrogen oxides (NO_x), volatile organic material (VOM), CO, SO₂ and hazardous air pollutants (HAP).^{11, 12}

¹¹ This source is also recognized as being a major source for emissions of greenhouse gases (GHG), with potential emissions of GHG are more than 100 tons per year, by mass, and 100,000 tons per year, as carbon dioxide equivalents (CO₂e). Ameren has voluntarily submitted data for actual emissions of GHGs from this source in its Annual Emission Reports (AER), which data confirms that the source is a major source for GHG emissions. However, this source is not currently subject to any "applicable requirements," as defined by Section 39.5(1) of the Act, for GHG emissions, as defined by 40 CFR 86.1818-12(a), as referenced by 40 CFR 52.21(b)(49)(i). There are no GHG-related requirements under the Clean Air Act, the Act, or Illinois' SIP that apply to this source, including terms or conditions in a construction permit addressing GHG emissions or BACT for GHG emissions from a major project at this source under the PSD rules. In addition, the USEPA's Mandatory Reporting Rule for GHG emissions, 40 CFR Part 98, does not constitute an "applicable requirement" because it was adopted under the authority of Sections 114(a)(1) and 208 of the Clean Air Act. This permit does not relieve Ameren from the legal obligation to comply with the relevant provisions of the Mandatory Reporting Rule for this source.

The source also requires a CAAPP Permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act, pursuant to 40 CFR 70.3(a) (4).

2.4 Fee Schedule

A schedule limiting the source's annual emissions is not included in the permit for the purpose of fees under the CAAPP. For this source, Ameren currently pays the maximum annual fee for a source under the CAAPP.

2.5 Construction Permits

The initial CAAPP issued for the source included conditions that originated in the following construction permits:

<i>Permit No.</i>	<i>Date Issued</i>	<i>Subject</i>
91080029	3/28/1995	Coffeen Auxiliary Boiler (CB-AUX4)
01040033	6/27/2001	Fine Grind Coal Crushers
01090039	11/30/2001	Coal Handling System Equipment

¹² The source's actual annual emissions of regulated pollutants, in tons, as reported by Ameren in its Annual Emission Reports (AER) sent to the Illinois EPA, are provided below:

<i>Pollutant</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>
CO	763.03	750.21	650.82
NO _x	1,450.0	1,585.7	2,296.8
PM	286.53	298.32	251.66
SO ₂	82.50	210.90	13,398.84
VOM	106.60	104.78	90.63
CO ₂ e	6,031,503.0	7,192,737.3	6,214,433.5
HAP (Mercury)	0.126	0.124	0.107

CHAPTER III - PLANNED CHANGES TO THE CAAPP PERMIT THAT WOULD BE MADE USING THE PROCEDURES FOR SIGNIFINANT MODIFICATIONS

3.1 Appeal Resolution

Introduction

Pursuant to Section 39.5(14)(c) of the Act, the changes addressed below would in the planned permit action, with all such changes being addressed using the CAAPP procedures for significant modification of permits. As previously discussed, every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping requirements shall be considered significant. Pursuant to 39.5(14)(c)(iii) of the Act, significant permit modifications must meet all the requirements of public participation, review by affected States, and review by USEPA applicable to initial permit issuance and permit renewal.

Conditions 5.6.1 and 5.7.2

Condition 5.6.1 of the initial CAAPP permit requires Ameren to maintain the records that are necessary for the source to prepare its Annual Emission Report (AER). Pursuant to 35 IAC 254.203(b), an AER, among other things, must include "[s]ource-wide totals of actual emissions for all regulated air pollutants emitted by the source". The definition of "[r]egulated air pollutant," as set forth in Section 39.5(1) of the Act includes "[a]ny pollutant subject to a standard promulgated under Section 112 . . . of the Clean Air Act."

In addition to these requirements, the initial CAAPP permit would have required Ameren to maintain records of emissions of three other pollutants: mercury (Hg), hydrogen chloride (HCl), and hydrogen fluoride (HF). The Illinois EPA included Hg, HCl, and HF in the general recordkeeping requirements, in large part, because of the public interest in emissions of these pollutants. Ameren challenged the ability of the CAAPP permit to require such additional recordkeeping in its appeal before the Board. At the time of the permit issuance, Hg, HCl, and HF were not yet regulated by any underlying state or federal regulatory requirement. The appeal point thus questioned the Illinois EPA's authority to impose a recordkeeping requirement for these pollutants when no underlying requirement existed in any environmental statutory or regulatory provision at the time of permit issuance.

The requirements for recordkeeping of Hg, HCl, and HF have been deleted because the Illinois EPA does not have the legal authority in a CAAPP permit to impose recordkeeping requirements for these pollutants. The elimination of these requirements reflects recognition that the recordkeeping requirement for individual pollutants that were not yet designated a "regulated pollutant" is beyond the scope of the Illinois EPA's express or implied permitting authority. In practice, recordkeeping for emissions of Hg, HCl, and HF is now governed by the general recordkeeping requirements of Condition 5.6.1, notwithstanding the removal of the specific references to these pollutants in the same condition. In this respect, the deletion of the specific reference to HF in Condition 5.6.1 is of minor significance now that Ameren is required to maintain records for HCl, which is a surrogate for HF.

Conditions 7.1.6(a) and 7.5.6(a) (ii)

Condition 7.1.6(a) of the CAAPP Permit required Ameren to perform combustion evaluations on the boilers on a quarterly basis. These evaluations measure the carbon monoxide (CO) concentrations in the flue gas of the boilers and are required to address compliance with the state CO standard, 35 IAC 216.121. Among other things, this condition required a formalized procedure for obtaining "diagnostic" measurements, as well as "adjustments and preventative and corrective measures" of the boilers to ensure proper combustion.

Ameren appealed the condition on the grounds that the combustion evaluation appeared to require a formalized type of emissions testing and that its ability to make "adjustments or other preventative and corrective measures" was limited by the bounds of technical feasibility. In resulting settlement negotiations, the Illinois EPA acknowledged that the original intent of the permit condition was not to require formal diagnostic testing, which is an engineering evaluation of systems to gather data beyond the standard operational measurements. Rather, the intent was to obtain quantitative information from the standard operational measurements on a continuous or periodic basis and thus serve as a gauge for how the combustion processes are functioning. The permit has been revised to clarify this aspect of the combustion evaluation.

The permit has also been revised to clarify that "adjustments or other preventative measures" are not a compulsory requirement following each and every combustion evaluation. The original intent of the permit condition was to ensure that adjustments or other corrective measures would occur only if, depending upon the findings of a given evaluation, such changes are needed in the normal automated operation of the boilers to improve combustion efficiency. The revised permit now clarifies the ambiguity of the earlier condition by providing that the combustion evaluation includes any "adjustments and preventative and corrective measures" undertaken to maintain combustion efficiency. Ameren is still required, consistent with the existing recordkeeping requirements of the CAAPP permit, to maintain records of the adjustments and preventative and corrective measures resulting from the combustion evaluation.

Consistent with the above discussion, the revised permit requires combustion evaluations for the coal-fired boilers to be conducted semi-annually. The evaluations will still provide all the quantitative information needed and will be consistent with other, similar types of reporting situations where semi-annual reporting is typical. For the auxiliary boiler, Condition 7.5.6(a) (ii) was generally revised in the same way, except that the frequency for evaluation now once during each year that the boiler operates.

Condition 7.1.7(b) (iii)

Condition 7.1.7 includes requirements for testing emissions of particulate matter (PM) from the coal-fired boilers. The initial CAAPP permit required emission testing by USEPA Methods 5 and 202. The Illinois EPA had chosen to include the additional requirements of Method 202 testing for condensable PM in the permit primarily as a result of public comments received regarding air quality and health-related impacts of PM emissions. Ameren challenged the inclusion Method 202 in the original CAAPP Permit, arguing that, as it addresses testing for condensable particulate matter (CPM),¹³ it had no basis

¹³ There are two kinds of PM, filterable and condensable. Filterable PM exists as a solid or liquid material at hot stack temperatures, while condensable PM is a vapor or gas and condenses

in law. The appeal point thus questioned the CAAPP permit's authority to require testing for CPM when no underlying requirement existed in any applicable statutory or regulatory provision at the time of permit issuance.

The measurement of CPM emissions using Method 202 has been deleted because the underlying regulatory requirements do not provide support for this requirement and the requirement was beyond the scope of the Illinois EPA's express or implied permitting authority.

Conditions 7.1.9(c) (ii) and (iii) (B)

Condition 7.1.9(c) sets forth recordkeeping requirements for the coal-fired boiler's Continuous Opacity Monitoring Systems (COMS). The issued CAAPP Permit relied upon a correlation between opacity and PM emissions, such that the level of opacity is indicative of whether PM emissions controls are being properly maintained and operated for compliance with applicable PM standards. Among other things, the CAAPP permit established a methodology by which Ameren was to develop an opacity value, during the permit term and through on-going emissions testing, that would be set at the "upper bound of the 95% confidence interval". This process thus would develop a specified, albeit evolving, value for opacity that would serve as an indicator of a potential problem with compliance assurance for PM and triggering the obligation for further recordkeeping and reporting established elsewhere in the permit.

Ameren appealed this condition on grounds that it imposed an "unreasonable burden" to develop an upper bound correlation and would not generate information that could be used in conjunction with inspection and opacity reports to assure compliance with the applicable PM standards. Subsequent settlement discussions confirmed the difficulties in the condition as stated. Among other things, it required a correlation between opacity and PM emissions meet a statistical criterion as related to the confidence interval that would not necessarily be able to be met given the nature of the correlation and the data that would be available to develop the correlation.

Instead of developing an opacity value in the future through the use of an established methodology, the revised CAAPP Permit arrives at the same endpoint through the selection of a value based on prior test data. This approach continues to rely on a relationship between opacity and PM compliance at this source when the control technology for PM is functioning correctly and the opacity remains below 30 percent.¹⁴ For both ease and conservatism, the numerical value of opacity corresponds to the applicable state opacity standard at 35 IAC 212.123. This is adequate to assure compliance with the applicable standard for PM emissions of 35 IAC 212.203, i.e., 0.19 and 0.15 lb/mmBtu for Unit 1 and Unit 2, respectively. Accordingly, compliance with the PM standard

into a liquid or solid after exiting the stack and cooling down. Method 5 is used as a standard test method for measuring filterable PM, while Method 202 is the reference test method for measuring condensable PM. To confirm compliance with applicable PM rules, only Method 5 testing is required.

¹⁴ The Illinois EPA reached this conclusion by reviewing the 3-run average PM value and comparing it to the three-hour average opacity value for each of the two boilers. Illinois EPA then assessed the data to determine whether an opacity value could be selected that would reasonably assure compliance with the PM standard. The data indicated that for these coal-fired boilers, there was a sufficient PM compliance margin for compliance with PM standards when the control technology for PM is functioning correctly as indicated by an opacity value that remains below 30 percent. Note that, although the emissions data was sufficient to confirm the adequacy of the relationship between the opacity limit and compliance assurance for PM, it is not possible or appropriate to draw additional conclusions from the data beyond that limited conclusion.

is reasonably assured if the opacity of emissions from a boiler does not exceed 30 percent, on a 3-hour block average.

The revised language requires Ameren to keep a record of all 3-hour block averages in which the average opacity exceeds 30 percent. The previous language requiring the source to undertake analysis and evaluation, and recordkeeping and reporting activities related to that condition, is no longer needed in light of the finding that the applicable state opacity standard will adequately assure compliance with PM. It is also noteworthy that this approach will eventually be replaced by the approach required by the federal Compliance Assurance Monitoring rule, as discussed later in Section 3.2.

Conditions 7.1.9(g) (i) and 7.1.10-2(a) (i) (D)

Condition 7.1.9(g) deals with recordkeeping associated with startup of the boilers. The CAAPP Permit requires that Ameren maintain basic information, such as a copy of the source startup procedures and the date, time, duration, and description of each startup. The CAAPP permit also required more detailed recordkeeping for any startup event that lasted longer than six hours. Ameren appealed this latter part of the condition on the grounds that startups for the boilers at this source are typically in excess of twenty-two hours and that the Illinois EPA had no basis to treat startups over six hours as requiring additional recordkeeping and explanation.

The intent of Condition 7.1.9(g) (ii) (C) was to trigger the need for additional documentation and explanation regarding boiler startups that are out of the ordinary and take longer than expected so that one has a record of why the startup was prolonged and whether excess emissions may have occurred during the process. The revised condition, which reflects a longer duration for normal boiler startups, 24 hours instead of 6 hours, now requires more detailed recordkeeping. This is based on information provided by Ameren that shows a typical startup lasts longer than 22 hours.

As a result of discussions with Ameren, it was concluded that its assumptions about typical startup durations at this source were imperfect. Startups up to 24 hours in duration should be considered typical for the coal-fired boilers at this source, given the design of these boilers. This change corrects a factual error about the source and Ameren is still required to maintain additional records for atypical startups.

Conditions 7.1.9(g) (ii), 7.1.9(h) (ii) (D) (III), and 7.5.9(d) (ii) (C) (III)

The original language did not require the source to quantify PM and CO emissions, but rather to provide "an estimate of the magnitude of emissions of PM and CO" because emissions may have exceeded an applicable hourly standard.¹⁵ The use of the term "may" in assessing whether an "hourly standard" has been exceeded clearly indicates that a quantitative comparison of the emissions allowed under the hourly standard to the actual emission during the startup, malfunction or breakdown could not be performed. The entire structure of these

¹⁵ An "estimate" may be defined as an approximate calculation, a judgment, or the extent of something. "Magnitude" means the greatness of size, volume or extent, or the importance or significance of something. Basically, the original condition required an evaluation and formation of an opinion about the level of emissions of PM and CO, i.e., compliant or noncompliant: minimal; moderate; severe; extreme, as an applicable hourly standard may have been exceeded. The definition of "explanation" is "to provide a statement giving the reasons for something or details of something."

two conditions is a recognition that a quantitative, numerical value could not be determined, but a qualitative, descriptive evaluation could be provided.

The change was made to provide more than just a description of the level of PM and CO emissions, but a perspective regarding those emissions. This condition now requires Ameren to provide additional discussion in order to make the data for "estimated" emissions meaningful.

Conditions 7.1.10-2(a) (i) (E), 7.1.10-2(d) (iv) (A) (IV), 7.1.10-2(d) (iv) (A) (V), 7.1.10-2(d) (iv) (A) (VI), 7.1.10-2(d) (iv) (A) (VII), and 7.1.10-2(d) (iv) (B).

Condition 7.1.10 sets forth the reporting requirements associated with the coal-fired boilers. As already discussed, the required recordkeeping related to the use of opacity as an indicator of potential problems associated with the operation of PM control equipment has been revised. Because Ameren will no longer be required to keep records under the previous approach, there is no longer a need to report on those types of records. Condition 7.1.10-2(a) (i) (E) is therefore obsolete and has been removed from the permit. New reporting language has been inserted to correspond with the new approach to the relationship between opacity and PM emissions.¹⁶

Conditions 7.1.10-2(a) (i) (E) and 7.1.10-2(d) (iv) (A) have been changed to correspond with the new approach for monitoring opacity and PM as discussed above for Condition 7.1.9(c). Ameren is now required to maintain records and submit reports for exceedances of a 30% opacity value.

Condition 7.1.10-3(a) (i)

Condition 7.1.10-3(a) deals with reporting requirements in the case of continued operation of the coal-fired boilers during malfunctions and breakdowns. The condition requires Ameren to provide certain notifications and reports concerning incidents when the operation of the boiler(s) continued with excess emissions, including malfunction or breakdown of the boiler. All such incidents must be reported by the source in its quarterly reports under Conditions 7.1.10-1(b) (periodic reporting of deviations) and 7.1.10-2(d) (reporting of opacity and PM emissions). In addition, Ameren must immediately notify Illinois EPA of such incidents when the opacity from an affected operation exceeds 30 percent for a eight or more 6-minute averaging periods (unless the source has begun to shut down the operation by that time).

Ameren appealed this condition and, in subsequent negotiations, expressed concerns about undertaking immediate notification at a time when events are still unfolding and/or are being investigated. As a result of these negotiations, the Illinois EPA learned that some of the assumptions it had made in selecting the initial timeframe of five 6-minute averaging periods were imperfect. Although the Illinois EPA had assumed that 30 minutes would be a sufficient opportunity for Ameren to take corrective action before needing to immediately report to the Illinois EPA, the allotted time admittedly may not always provide an adequate window of time.¹⁷

¹⁶ Condition 7.1.10-3(a)(ii) requires incidents in which the PM standard may have been exceeded (i.e., actually was exceeded or in which an exceedance may have occurred) to be reported to the Illinois EPA within 15 days.

¹⁷ To illustrate, once a problem is detected at the source, a supervisor need to radio an operator, wait for that person to physically travel to the location of the problem (which could be, for example, on the other side of the plant), and then wait for the operator to inspect and diagnose what is happening or to call in another specialist if necessary - all before the possibility of

While Illinois EPA cannot address every logistical challenge at this sources, it does have an interest in providing appropriate incentives for implementation of corrective actions. Indeed, rapid corrective action is the desired result for the types of incidents involving malfunction or breakdown.

Thus the number of 6-minute averaging periods, before the immediate notification requirement of the condition is triggered, has been increased from five to eight. In other words, the source will now have additional time (i.e., a total of 18 minutes) in which to attempt to correct the problem or begin to shut down a boiler before it needs to go through the immediate notification process. However, in light of striking an appropriate balance between incentivizing corrective action and immediate notification, this additional time should be considered trivial. In this regard, the additional time would not have any effect on how the Illinois EPA may or may not respond to these notifications.

Conditions 7.2.7, 7.2.8, 7.3.7, 7.3.8, 7.4.7 and 7.4.8

The revised permit changes requirements for observations for opacity and visible emissions for the coal handling and processing operations and the flyash handling operation at the source. The changes adjust the number of required Method 9 observations and add Method 22 observations. If visible emissions are detected during a Method 22 observation, the source can either take corrective action within a designated two hour period or conduct a follow-up Method 9 observation to determine the opacity value. These changes include additional provisions related to the frequency of observations and corrective action.

The CAAPP permit provides for periodic monitoring through a variety of requirements. Conditions 7.2.7 (coal handling), 7.3.7 (coal processing) and 7.4.7 (flyash handling) set forth requirements for opacity observations. Conditions 7.2.8 (coal handling), 7.3.8 (coal processing) and 7.4.8 (flyash handling) provide the inspection requirements. The combination of requirements fulfills the need to periodically monitor the various pieces of coal handling and process equipment to confirm they are not emitting dust or other visible emissions in violation of applicable opacity and PM standards. The CAAPP Permit required subject operation to undergo opacity observations by Method 9 test at least annually (i.e., a minimum of five tests during the five-year permit term). For inspections, the CAAPP Permit required affected operations to be inspected at least monthly for coal handling and at least weekly for coal processing. These inspections were designed to evaluate the conditions of the affected control devices, including the presence of any visible emissions, and were required to be performed by personnel "not directly involved" in day-to-day operations of the coal handling and processing activities.

Ameren appealed these requirements on the grounds that the affected processes did not exhaust emissions through a stack and should not be subject to monitoring requirements intended for stack or non-fugitive emissions. In settlement negotiations, it was recognized that the subject coal handling and coal processing operations should not have been treated as having control devices but, rather, as having control measures.¹⁸ As such measures do not

corrective action becomes available. By that time, there is, or would be, very little time left in the 30-minute window of opportunity to take corrective action.

¹⁸ Control measures to limit dust or other emissions include such things as the natural moisture content of the coal, water spray to the coal, and the installation of enclosures and covers. Control devices, on the other hand, would be equipment such as actual dust control equipment, which

involve stacks, it is wholly impractical to directly measure emissions with emissions testing and compliance is appropriately monitored through observations.

In addition, Ameren appealed the inspection requirements on the grounds that they should be overseen by qualified personnel who possess the requisite knowledge to conduct detailed inspections in a safe manner.

The revised CAAPP Permit would generally make some modest adjustments to the testing and inspection requirements associated with periodic monitoring for the coal handling and processing operations. The objective in resolving these periodic monitoring issues has been to preserve the framework and continuity of the original permit, such that any changes to the various components of periodic monitoring should not significantly relax or alter the basic approach to periodic monitoring. At the same time, the Illinois EPA has recognized the need to reconcile any revised CAAPP secured through a negotiated settlement with 1) an admittedly erroneous assumption regarding the presence of control devices and 2) an inspection protocol that, although well-intentioned, poses certain implications on the quality and burdens associated with the monitoring. On balance, these changes are consistent with the broad outline of periodic monitoring established in the original CAAPP permit and, indeed, can be seen as strengthening the robustness of the overall approach.

First, in recognizing the use of control measures rather than control devices, the number of mandatory Method 9 observations has been reduced to two annual tests during the permit term. At the same time, observations for visible emissions by Method 22 has been introduced into the inspection requirements as a substitute for the previous inspection requirements. The observations for visible emissions, in which the observer determines the presence or absence of visible emissions,¹⁹ will be employed as an on-going monitoring tool. Method 22 observations²⁰ must now be conducted during at least one of the existing monthly inspections of coal handling and processing equipment per year and during at least one of the existing weekly inspections of fly ash handling equipment per year.²¹ If visible emissions are detected during a Method 22 observation, the source can either take corrective action within a designated two hour period or conduct a follow-up Method 9 observation to determine the opacity value.^{22, 23}

is not present on the subject emission units. It should also be noted, notwithstanding a legal argument presented in Ameren's appeal to the contrary, these processes have not been treated as fugitive emission source so as to exclude them from the applicability of 35 IAC 212.123.

¹⁹ Method 22 involves observations for a set period of time. Observers do not have to be certified (although observer should be trained by attending the lecture and field practice session of Method 9 certification or "smoke school". In comparison, Method 9 makes a determination of the value of the opacity of emissions. Method 9 involves making an instantaneous determination of opacity every 15 seconds for a set period of time. In addition, Method 9 contains data reduction and reporting procedures, as well as procedures and specifications for training and certifying observers.

²⁰ This is because Method 22 is a qualitative method that is designed to detect the presence or absence of visible emissions, while Method 9 attempts to quantify the opacity of the visible emissions. Method 22 visible emissions observations are generally considered more reliable than Method 9 for tracking continuous compliance by non-point (non-stack) emission sources.

²¹ Condition 7.4.8(a) sets forth a weekly inspection requirement for fly ash handling

²² In most cases, Illinois EPA anticipates that the source would likely choose to undertake a Method 9 observation to confirm that the visible emissions detected during the Method 22 observation are, in fact, in compliance with the opacity standard for the particular operation. This is because, in many instances, there simply may be not be any corrective action to be implemented.

²³ To help explain this revised approach to inspections, a coal conveyer example is offered here as an illustration of how inspections will be implemented. Under the revised CAAPP Permit, at least one monthly inspection of the conveyer each year must now include a Method 22 with a follow-up Method 9, if necessary. The inspection requirements could produce as many as five Method 9 observations of the coal conveyer (one each year during the five-year permit term, depending on

The revised CAAPP Permit also includes clarifying language to distinguish the previous weekly inspections for the coal crusher from the more involved monthly inspections of the various coal handling operations. First, the coal crusher is completely contained within a structure that has no emission points; thus, it does not require the type or rigor of monitoring required of other operations. Consistent with this recognition, the Illinois EPA's original intent had been for the weekly inspections of the crusher to be a "walk-around" type of inspection. The purpose of such a qualitative inspection is simply to verify that no visible problems exist, for instance, holes or other deterioration in the enclosure.²⁴ On the other hand, while much of the coal handling equipment is covered or enclosed, there are many more emission points where visible emissions can occur as the coal moves from point to point at the source. The coal handling inspections require certification by supervisory or management personnel and occur on a monthly basis.

Although certain aspects of the periodic monitoring for the coal handling and processing units have certainly changed, the basic components, including observations, recordkeeping and reporting remain the same. More importantly, the overall approach to periodic monitoring has been strengthened due to the overall increase in the frequency of formal observations.

Conditions 7.2.7(a) (v), 7.3.7(a) (v), and 7.4.7(a) (v)

After completing one of the Method 9 opacity observations discussed above, Ameren is required to submit a written report to Illinois EPA pursuant to Conditions 7.2.7(a) (v) and 7.3.7(a) (v). The CAAPP Permit required the report to be submitted within 15 days of the date of observations. Ameren appealed this conditions and, as part of settlement negotiations, requested that the timeframe for submittal be extended to 30 days for administrative convenience and consistency with other, similar types of reporting situations.

The reports required by this condition are generated from the two mandated Method 9 opacity observations that are required on each coal handling and processing operation over the term of the permit. Importantly, these observations are required to take place during "representative operating conditions (i.e., when the coal handling and processing operations are functioning normally). By definition, these observations cannot, and should not, occur whenever something is not functioning correctly or excess emissions are occurring. The observations are intended to confirm that, during normal operations, the inspections and other monitoring activities are assuring that the operations remain in compliance with opacity standards. Therefore, the additional 15 days to submit the reports following testing will not cause any potential for delay in responding to an urgent situation at the facility because these types of reports do not convey that kind of information. The

whether the Method 22 observation detects visible emissions and the source does not take corrective action). The testing requirements in the Revised CAAPP Permit mandate at least two Method 9 observations of the conveyor during the term of the permit. Therefore, the coal conveyor will be monitored for opacity compliance no fewer than seven times during the permit term. This number is based on the two mandated Method 9 observations, plus the five mandated Method 22 observations that will either verify zero visible emissions or lead to corrective action or to a follow-up Method 9. This is in contrast to the original permit's testing conditions that only included five mandated Method 9 observations of the coal conveyor over the permit term.

²⁴ The revised CAAPP permit also adds language to Condition 7.3.8 (and elsewhere in Section 7.3) to make clear that the conveyor points that deliver and remove coal from the crusher are part of the coal handling system (not coal processing) and that these conveyor points are addressed by the provisions in Section 7.2 of the permit.

Illinois EPA simply receives the reports and analyzes them to see if adjustments need to be made to the overall periodic monitoring system for the given operations.

Conditions 7.2.9(b) (iii) & (iv), 7.3.9(b) (i) & (ii), and 7.4.9(b) (i) & (ii)

Condition 5.6.2(d) from the initial CAAPP permit, which addressed Retention & Availability of Records in general and records required under Chapter 7 of the permit specifically, was deleted. The requirement to create and retain records is now addressed in Conditions 7.2.9(b), 7.3.9(b), and 7.4.9(b).

The time frames for submitting initial creation of records and revisions has changed, and now allows the source more time; i.e., from 30 to 60 days to submit the initial records and from 10 to 30 days to submit the revised records. However, the Illinois EPA cannot/does not review such records within the shorter timeframes, so allowing the source more time to submit the records does not practically change the monitoring of the source's operations. Moreover, the source must maintain records at the source whenever it implements a change to its control measures, and if an inspection were done and these records were not available at the time of inspection, the source would be in violation of its permit. See Condition 5.6.2(a) & (b).

Conditions 7.2.10(b) (i) (A) and 7.3.10(b) (i) (A)

The notification and reporting requirements for continued operation of the coal handling and processing operations during malfunctions and breakdowns are revised. Under these provisions, Ameren is required to immediately notify Illinois EPA of such incidents when the opacity from an affected operation exceeds 30 percent for eight or more six-minute averaging periods (unless the source has begun to shut down the operation by that time), instead of five or more six-minute averaging periods, as required in the 2005 permit.

Conditions 7.2.10(b) and 7.3.10(b) involve reporting requirements in the case of continued operation of the coal handling and processing operations, respectively, during malfunctions and breakdowns. This condition requires Ameren to provide certain notifications and reports to Illinois EPA concerning incidents when operation of affected operation or operations continued with excess emissions, including malfunction or breakdown.

All such incidents must be reported by the source in its quarterly reports under Conditions 7.2.10(b) (ii) and 7.3.10(b) (ii). In addition, the source must immediately notify Illinois EPA of such incidents when the opacity from an affected operation exceeds 30 percent for a certain number of 6-minute averaging periods (unless the source has begun to shut down the operation by that time).

The revised CAAPP Permit would extend the number of 6-minute averaging periods from five to eight before the immediate notification requirement is triggered. In other words, Ameren now has an additional 18 minutes to attempt to correct the problem at a subject operation or begin shut down of the operation before it needs to go through the immediate notification process. Further discussion is provided in relation to the changes to Condition 7.1.10-3(a) (i).

3.2 Compliance Assurance Monitoring additions to the Permit

The Coffeen Energy Center is a major source under the CAAPP and the coal-fired boilers are Pollutant Specific Emission Units (PSEUs) that are subject to

numerous emission standards, many of which require the use of control device to achieve compliance. Based on the applicability provisions of CAM, including certain exemptions, other PSEUs at the source would not be subject CAM requirements.

Condition 5.2.7 - General applicability of 40 CFR Part 64

Condition 5.2.7 initially required that Ameren address the federal Compliance Assurance Monitoring Rule (40 CFR Part 64) upon renewal or application for a significant modification of the permit. As a result of this permit action, which would involve processing certain changes to the permit as a significant modification, CAM would be addressed for those emission units that are the subject of this significant modification. Because CAM is being addressed in this significant modification, Condition 5.2.7 is now obsolete and would be removed from the permit.

Conditions 7.1.5(c) - SO₂ and NO_x Acid Rain emission standards

The coal-fired boilers are subject to the Acid Rain requirements for Electric Generating Units (EGU). These requirements cover SO₂ and NO_x emissions. The Acid Rain Program contains specific emissions monitoring requirements. CAM contains an exemption for the Acid Rain rules, 40 CFR 64.2(b)(1)(iii). Therefore, a non-applicability statement has been added for these PSEUs relative to the Acid Rain program.

Conditions 7.1.5 (d) - SIP SO₂ and NO_x emission standards

The coal-fired boilers are subject to SIP requirements for SO₂ and NO_x emissions. The CAAPP permit contains continuous compliance determination methods that are sufficient to comply with CAM. In accordance with 40 CFR 64.2(b)(1)(vi), PSEUs are exempt from CAM if there is a continuous compliance determination method that is permitted. Therefore, a non-applicability statement has been added for these boilers and these SIP standards.

Conditions 7.1.5 (e) - CO SIP emission standards

The coal-fired boilers are subject to SIP requirements for CO emissions. However, control devices as defined by 40 CFR 64.1 for CO are not used on these boilers. Therefore, a non-applicability statement has been added for these PSEU's and emission standards.

Condition 7.1.13-1 - Conditional Approval of CAM Plan

In this planned significant modification, the Illinois EPA is proposing to "conditionally approve" Ameren's CAM Plan discussed in recent settlement negotiations and submitted in the application discussed above. This conditional approval is being given to address the current lack of sufficient g unit-specific performance test data for PM emissions with concurrent data opacity. Therefore, Ameren must conduct performance testing for PM emissions to confirm the ability of the monitoring to provide data sufficient to satisfy 40 CFR Part 64 and/or confirm the appropriateness of indicator ranges or designated conditions to satisfy 40 CFR 64.3(a)(2) and (3).

In its CAM Plan, Ameren submitted an implementation plan and schedule which contains appropriate milestones for completing necessary testing for PM emissions, consistent with the requirements in 40 CFR 64.4(d)(1) and (e). This

implementation plan and enforceable schedule have been included in the draft CAAPP permit as Condition 7.1.13-1.

Condition 7.1.13-2 and Tables 7.1.13a & b - Compliance Assurance Monitoring

Opacity, as measured by the COMs, and the number of absorber recycle pumps in service on the units' WFGD systems, are the two indicators that will be used to provide a reasonable assurance of compliance with the particulate matter (PM) emission limit for the boilers. Opacity is an indicator of particulate loading in the flue gas and the number of recycle pumps in operation indicates the scrubber is operating and thus able to remove PM. Testing activities will be conducted to ascertain compliance with the PM emissions limit under various operating conditions for the boilers and the WFGD systems.

Testing activities will be conducted to ascertain appropriate indicator ranges for assuring compliance with the PM emissions limit under various operating conditions for the boilers and the WFGD systems. Testing will determine the upper limit of opacity, as measured in the flue gas stream, which assures compliance with the PM limit. Testing will also determine the number of recycle pumps operating that will ensure proper operation of the WFGD systems.

Condition 7.2.5(b)

The coal handling equipment which consists of various transfer and storage operations is subject to SIP requirements, NSPS requirements and construction permit requirements for PM emissions. However, this equipment, both on an individual and aggregate emission unit basis, has pre-control PTE emissions of PM less than major source thresholds. Therefore, a non-applicability statement has been added for these PSEUs and these emission standards.

Condition 7.3.5(a)

The coal processing equipment, which consists of coal crushing, is subject to SIP requirements, NSPS requirements and construction permit requirements for PM emissions. However, there are no control devices as defined by 40 CFR 64.1 for PM used on crushing. Therefore, a non-applicability statement has been added for these PSEU's and applicable emission standards.

Condition 7.4.5(a)

The fly ash handling operation, which consists of various transfer and storage equipment, is subject to SIP requirements for PM emissions. However, this equipment, both on an individual and aggregate emission unit basis, has pre-control PTE emissions of PM less than major source thresholds. Therefore, a non-applicability statement has been added for these PSEU's and standards.

Condition 7.5.5(g)

The auxiliary boiler is subject to SIP requirements for SO₂, PM and CO emissions, as well as an NSPS requirement for SO₂ emissions. However, control device(s) as defined by 40 CFR 64.1 are not used for any of these pollutants. Therefore, a non-applicability statement has been added for this unit and the applicable emission standards.

Section 7.6

This section of the permit was not affected by this significant modification and therefore CAM needs to be addressed only at renewal unless a significant modification or re-opening occurs for the subject gasoline storage operation. Condition 7.6.5(d) has been added to the permit to its status relative to CAM.

3.3 Reopening

Condition 5.9

In this new condition, Ameren would be required to facilitate the Illinois EPA's reopening of the CAAPP permit in accordance with Section 39.5(15)(a)(i) of the Act and 35 IAC 270.503(a)(1). As discussed, this permit reopening will address additional requirements under the Clean Air Act that have become applicable to the source since 2005 and will be initiated by the Illinois EPA in a separate proceeding in the near future. In order to address a potential objection to the CAAPP permit for the Coffeen Energy Center or other possible administrative action by USEPA, the revised permit would include a requirement that Ameren provide certain information to the Illinois EPA in advance of, or contemporaneous with, this permit reopening.

Timing of Information Submittal: Ameren would be required to submit the information specified by Condition 5.9(a)(i) and (ii) to the Illinois EPA within 30 days of permit issuance, unless the CAAPP permit has been reopened at the time of permit issuance. The information shall be submitted as part of a revised CAAPP permit application.

Identification of Additional Clean Air Act Requirements: As part of the information requested by this permit condition, Ameren would be required to identify all additional Clean Air Act requirements that have become applicable to the source since September 29, 2005. This identification must adhere to the definition of "applicable Clean Air Act requirement," as set forth in Section 39.5(1) of the Act.

Identification of Related Noncompliance: Ameren would also be required to identify any noncompliance associated with these new "applicable Clean Air Act requirement," including the identification of the requirement and affected emission unit(s), the nature of the noncompliance, an explanation of the source's failure to comply with the requirement and a proposed compliance plan and schedule for the subject emission unit(s).

CHAPTER IV - SUPPLEMENTAL INFORMATION

This chapter provides supplemental information that may assist interested individuals in understanding the permitting action that is now planned as it provides background on the CAAPP permit that was initially issued for the source and certain provisions included in CAAPP permits.

4.1 Discussion of Monitoring for Significant Emission Units²⁵

a. Coal-Fired Boilers

This source has two coal-fired boilers whose steam output is used for generation of electricity. The boilers use Fuel oil as their auxiliary fuel.

CO emissions from the boilers are addressed by good combustion practices. NO_x emissions from the boilers are controlled by combustion control measures including low-NO_x burners (LNB), over fire air systems (OFA) and add-on selective catalytic reduction system (SCR). PM emissions are controlled by electrostatic precipitators (ESP).

The boilers are subject to emission standards for CO, NO_x, PM, and SO₂ and standards for the opacity of emissions. The boilers are also subject to the federal Acid Rain Program, which imposes requirements on SO₂ and NO_x emissions and requires that the boilers be equipped with continuous monitoring systems (CMS) for SO₂ and NO_x with computerized data systems for collection of data.

The boilers have the potential to exceed the applicable opacity limits and emission standards during malfunction and breakdown of equipment. As provided by applicable regulations, subject to certain terms and conditions, the boilers are authorized to continue operations with excess emissions as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment. In particular, upon occurrence of excess emissions, the source shall, as soon as practicable, reduce boiler load, repair the affected boiler, remove the affected boiler from service, or undertake other action so that excess emissions cease.

The boilers are operated pursuant to formal operating procedures. The permits require that the boilers must be started up in accordance with procedures that are developed and maintained to minimize emissions.

For PM, for which continuous emissions monitoring is not performed, emissions testing is required. Recent testing of the boilers for PM showed compliance with the applicable limits with significant margins of compliance.²⁶ Initial

²⁵ This discussion does not address insignificant activities at this source. Insignificant activities at the source are addressed in Section 3 of the issued CAAPP permit.

²⁶ The results of recent PM emission testing conducted by Ameren are provided below.

<i>Boiler</i>	<i>Date</i>		<i>Results of Run #1</i>	<i>Results of Run #2</i>	<i>Results of Run #3</i>	<i>3-Run Average</i>	<i>Compliance Margin %</i>
Unit 1	2/3-4/10	PM	0.00378 lb/mmBtu	0.00275 lb/mmBtu	0.00228 lb/mmBtu	0.00294 lb/mmBtu	98.5%
		Opacity	8%	8%	7%	8%	73.7%
	2/4-5/10	PM	0.00279 lb/mmBtu	0.00239 lb/mmBtu	0.00231 lb/mmBtu	0.00250 lb/mmBtu	98.7%
		Opacity	6%	7%	8%	7%	76.7%
Unit 2	6/29/10	PM	0.00282 lb/mmBtu	0.00262 lb/mmBtu	0.00348 lb/mmBtu	0.00297 lb/mmBtu	98.0%
		Opacity	16%	15%	14%	15%	50.0%

PM testing under the CAAPP is to be performed within one year of the permit becoming effective. The time interval between subsequent, periodic testing is, in part, dictated by the results of the prior test. Testing must be performed using standard reference Methods 5. CO emissions testing is also required for the boilers and shall be performed in conjunction with PM testing unless a CO test was completed during a prior relative accuracy test audit (RATA) for CMS. All emissions testing is conducted at maximum operating load and other operating conditions that are consistent with normal operation.

Operating records are to be maintained for the boiler's control equipment and for continuous monitoring equipment. Regarding startup events, the source must maintain records that include: the date, description, and duration of each startup. In addition, if startup does not progress in a timely manner to operation in compliance with applicable standards or if the source's startup procedures are not followed, further records are required.

Regarding malfunction/breakdown events, the source shall maintain records that include a maintenance and repair log and records for each incident when operation of a boiler continued with excess emissions. These records must include the date, duration, and description of the malfunction/breakdown; the corrective actions used to reduce the quantity of emissions and the duration of the incident; information on whether opacity exceeded the applicable standard for two or more hours; whether PM, CO, or NO_x emissions may have exceeded the applicable standard; a detailed explanation of why continued operation of the affected boiler was necessary; the preventative measures that have been or will be taken to prevent similar malfunctions or breakdowns in the future including any repairs to the affected boilers and associated equipment; and an estimate of the magnitude of excess emissions during the incident.

The provisions of the permits for notification and reporting provide a hierarchy of reports. Excess PM emissions, which would be associated with malfunction/breakdown of equipment and followed by a written report within 15 days of the event. Extended opacity exceedances, in which the total duration of exceedances is greater than the specified time period are also to be reported immediately and then followed with a written report within 15 days if they persist for more than 120 minutes (20 exceedances). The plants are also required to submit quarterly reports that address exceedances, along with data from the CMS for SO₂, NO_x, and opacity.

The source is required to provide information in the quarterly reports addressing all deviations from applicable requirements of the permit, including both emission control requirements and requirements for monitoring and recordkeeping. Such reports would also include information on the total operating hours; the greatest load achieved by each boiler; a discussion of significant changes in the fuel supply; the number, nature, and total duration of startups; information for SO₂, NO_x, and PM emissions and opacity; and operational information for continuous monitoring systems. These reports must include the following information for each period when emissions were in excess of an applicable limitation: the starting date, time, and duration of the excess emissions; the measured emissions rate; and a detailed explanation of the cause of the excess emissions with a discussion of the corrective actions taken to lessen the emissions. Similar information would be required in the unlikely event that CO emissions exceeded the applicable standard, as would be determined from operational data for a boiler.

For opacity and PM exceedances, the quarterly reports must also contain summary information. For each type of recurring opacity exceedance, the reports must

include information addressing the effectiveness of corrective actions and the role of component failure or degradation. In addition, these reports must provide further information for any new type(s) of opacity exceedance, including a general narrative description, a general explanation of the cause(s), a detailed explanation of the corrective actions, the effectiveness of those actions and the likelihood of future occurrence. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter should also be reported.

In the case of a malfunction/breakdown, the source shall immediately notify the Illinois EPA when the applicable PM emissions standard could be exceeded or where the opacity from the boiler exceeds or may have exceeded the applicable limit for more than the specified time period. A follow-up report is to be submitted within 15 days.

b. Auxiliary Boiler

The auxiliary boiler provides steam to support the operation of the plant, including producing steam to heat the coal-fired boilers as part of the preliminary startup of the boilers, not for generation of electricity or distribution. These boilers do not operate when the power boilers are operating except for maintenance and readiness operations/testing.

c. Coal Handling and Coal Processing

The source handles, transfers, and stores coal in a series of operations. Coal processing is also conducted to reduce the size of the coal to meet the fuel size requirements of the boilers. PM from coal-handling and coal processing is controlled by various measures including a dust collection device on the surge bin, the natural moisture content of the coal, application of dust suppressant and water spray, as well as with enclosures and covers. The PM emission from coal handling and processing are subject to an opacity limit and various regulations that address fugitive PM emissions. The PM emissions from coal processing operations are also subject to PM emission standards for process emission units.

For coal handling and processing, at least monthly inspections of control measures are to be performed while the equipment is in use. These inspections are to confirm compliance with the work practices utilized to control dust (PM emissions).

For coal handling and processing, opacity testing is to be performed on an annual basis with initial testing generally required within three months of the permit condition becoming effective. For coal handling, subsequent testing shall be performed at least annually. Additionally, for coal processing, to address the PM emission standards, PM testing shall be promptly performed upon request of the Agency. Testing on a set frequency is not required because the control measures used for coal processing, when properly operated assure compliance with these standards and the performance of control measures can be assessed by direct observation. A provision is made for testing upon request in the event that such direct observations are unable to determine compliance.

For both coal handling and processing, records shall be maintained for, among other things, the control measures that are being used, operational data, maintenance and repair activities, and any malfunction/breakdown of equipment. Records of the required inspections shall also be kept.

Reporting of deviations from the established control measures that last more than 12 hours shall occur within 30 days. All deviations from applicable standards or limitations in the permit must be addressed in a quarterly report, submitted with the quarterly report for the coal-fired boilers.

d. Ash Handling Process

The source operates ash removal systems that handle ash collected at the coal-fired boilers in a dry state. PM is controlled by enclosures.

Regular inspections of control measures are required of the operation while the equipment is in use.

Initial testing must generally occur within three months of the permit condition becoming effective. Subsequent testing shall be performed at least annually. Such observations are only required for ash handling equipment from which visible emissions, i.e., any visible emission, are normally observed. All units must also undergo PM testing at the request of the Agency.

The source shall keep records of, among other things, the specific control measures that are used, operational data, required inspections, and times when the control measures are not utilized.

Reporting of an extended deviation from the identified control measures, generally more than two and twelve hours respectively, shall occur within 30 days. All deviations from applicable requirements in the permit shall be addressed in the quarterly report accompanying the report for the coal-fired boilers.

e. Gasoline Storage

The source utilizes a small gasoline storage tank for fueling of plant vehicles. The tank is subject to various regulations for control of emissions of volatile organic material (VOM) from storage and transfer of gasoline. The tank needs to be equipped with a permanent submerged loading pipe.

Annual inspections of the tank is required. The source also must keep appropriate records to show compliance with applicable requirements, such as maintenance and repair logs for the loading and control pipes system.

The source shall report significant deviations from the applicable permit requirement, i.e., failure of the submerged loading within 30 days. These facilities must also report in the quarterly report for the coal-fired boilers any other deviations.

4.2 Discussion of Reporting Required by CAAPP Permits

Among other terms and conditions, CAAPP Permits contain reporting obligations to assure compliance with applicable requirements. These reporting obligations are generally four-fold. More specifically, each CAAPP Permit sets forth any reporting requirements specified by state or federal law or regulation, requires prompt reports of deviations from applicable requirements, requires reports of deviations from required monitoring and requires a report certifying the status of compliance with terms and conditions of the CAAPP Permit over the calendar year.

The number and frequency of reporting obligations in any CAAPP Permit is source-specific. That is, the reporting obligations are directly related to factors, including the number and type of emission units and applicable requirements, the complexity of the source and the compliance status. This four-fold approach to reporting is common to virtually all CAAPP Permits as described below. Moreover, this is the approach established in the initial CAAPP permit for this source.

Regulatory Reports

Many state and federal environmental regulations establish reporting obligations. These obligations vary from rule-to-rule and thus from CAAPP source to CAAPP source and from CAAPP Permit to CAAPP Permit. The variation is found in the report triggering events, reporting period, reporting frequency and reporting content. Regardless, the CAAPP makes clear that all reports established under applicable regulations shall be carried forward into the CAAPP Permit as stated in Section 39.5(7)(b) of the Act. Generally, where sufficiently detailed to meet the exacting standards of the CAAPP, the regulatory reporting requirements are simply restated in the CAAPP Permit. Depending on the regulatory obligations, these regulatory reports may also constitute a deviation report as described below.

The initial CAAPP Permit for this source embodies all regulatory reporting under federal and state regulations under the Clean Air Act and the Act as of the date that it was issued. Depending on the frequency of the report, the regulatory report may also satisfy the prompt reporting obligations discussed below. These reports must be certified by a responsible official.

These reports are generally found in the reporting sections for each emission unit group. The various regulatory reporting requirements are summarized in the table at the end of this Reporting Section.

Deviation Reports (Prompt Reporting)

Section 39.5(7)(f)(ii) of the Act mandates that each CAAPP Permit require prompt reporting of deviations from the permit requirements. Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term "prompt". Rather, 40 CFR Part 70.6(a)(3)(iii)(B) intended that the term have flexibility in application. The USEPA has acknowledged for purposes of administrative efficiency and clarity that the permitting authority (in this case, Illinois EPA) has the discretion to define "prompt" in relation to the degree and type of deviation likely to occur at a particular source. The Illinois EPA follows this approach and defines prompt reporting on a permit-by-permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, the Illinois EPA typically incorporates the pre-established timeframe in the CAAPP permit (e.g. a NESHAP or NSPS deviation report). Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA generally uses a timeframe of 30 days to define prompt reporting of deviations.

This approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Act as well as 40 CFR Part 70 and the Clean Air Act. The reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time

to conduct a thorough investigation into the causes of an event, collecting any necessary data, and developing preventive measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation, while at the same time affording regulatory authority and the public timely and relevant information. The approach also affords the Illinois EPA and USEPA an opportunity to direct investigation and follow-up activities, and to make compliance and enforcement decisions in a timely fashion.

The CAAPP Permit for this source requires prompt reporting as required by the Act in the fashion described in this subsection. In addition, pursuant to Section 39.5(7)(f)(i) of the Act, this CAAPP Permit requires the source to provide a summary of all deviations with the Quarterly Reports. These reports must be certified by a responsible official, and are generally found in the reporting sections for each emission unit group.

Semi-Annual Monitoring Reports

Section 39.5(7)(f)(i) of the Act mandates that each CAAPP Permit require a report relative to monitoring obligations as set forth in the permit. Depending upon the monitoring obligation at issue, the semi-annual monitoring report may also constitute a deviation report as previously discussed. This monitoring at issue includes instrumental and non-instrumental emissions monitoring, emissions analyses, and emissions testing established by state or federal laws or regulations or as established in the CAAPP Permit. This monitoring also includes recordkeeping. Each deviation from each monitoring requirement must be identified in the relevant periodic report. These reports provide a timely opportunity to assess for compliance patterns of concern. These reports shall be submitted regardless of any deviation events. Reporting periods for semi-annual monitoring reports are January 1 through June 30 and July 1 through December 31 of each calendar year. Each semi-annual report is due within 30 days after the close of reporting period. The reports shall be certified by a responsible official.

Annual Compliance Certifications

Section 39.5(7)(p)(v) of the Act mandates that each CAAPP Permit require a source to submit a certification of its compliance status with each term and condition of its CAAPP Permit. The reports afford a broad assessment of a CAAPP sources compliance status. The CAAPP requires that this report be submitted, regardless of compliance status, on an annual basis. Each CAAPP Permit requires this annual certification be submitted by May 1 of the year immediately following the calendar year reporting period. The report shall be certified by a responsible official.

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA, and the public rely on timely and accurate reports submitted by the source to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of the source's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this CAAPP Permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit

term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute a deviation from an emission limitation or standard or the like, as necessary and appropriate.

As a result, the approach to prompt reporting of deviations in the CAAPP, as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Act as well as 40 CFR Part 70 and the Clean Air Act. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention.

4.3 Discussions of Start-up and Malfunction/Breakdown

The CAAPP permit for the source does not provide for "automatic exemptions" for operation with excess emissions during startups or malfunction/breakdown. As related to state emissions standards under Illinois' State Implementation Plan (SIP), CAAPP permits are consistent with the Illinois SIP and federal guidance on the subject of compliance during Start-up and Malfunction/Breakdown. An explanation of Illinois' SIP and permitting practice in CAAPP permits follows.

Illinois' SIP at 35 IAC 201.149 prohibits continued operation of an emission unit during malfunction or breakdown of the unit or associated air pollution control equipment, or startup of an emission unit or associated air pollution control equipment, if such operation would cause a violation of applicable emission standards or limits absent express permit authorization. Further provisions pertaining to such permit authorization are set forth in 35 IAC Part 201, Subpart I. These provisions make clear that the process in Illinois for addressing malfunction/breakdown and startup is in two steps. The first step, as set forth at 35 IAC 201.261, consists of seeking authorization, by means of an application for permit, to make a future claim of malfunction/breakdown or startup. Pursuant to the provisions for malfunction/breakdown, the application shall include an explanation of why continued operation is necessary; the anticipated nature, quantity and duration of emissions; and measures that will be taken to minimize the quantity and duration of emissions. Pursuant to the applicable regulation, for startup, the application shall include a description of the startup procedure, duration, and frequencies of startups, type, and quantity of emissions during startups and efforts to minimize emissions, duration, and frequency. These regulatory requirements are acknowledged by the CAAPP, pursuant to Section 39.5(5)(s) of the Act. Absent a request for authorization in an application for a CAAPP permit that satisfies both the requirements for application content and the standards for granting, and, after Illinois EPA review, an express grant of such authorization in a CAAPP Permit issued by the Illinois EPA, a CAAPP source cannot make a claim of malfunction/breakdown or startup under Illinois rules.

The second phase of Illinois' process for operation with excess emissions during malfunction/breakdown or startup, as set forth at 35 IAC 201.262, addresses the showing that must be made in order to make a viable claim of malfunction/breakdown or startup. Pursuant to the regulations for malfunction/breakdown, this showing consists of a demonstration that operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. There are two elements to the

required showing, "need" and "function". For startup, it shall consist of a demonstration that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such events. To a certain extent, this showing may be evaluated on past practice. However, this showing is also prospective, like the showing for malfunction/breakdown, as it relates to future events, which and whose exact circumstances are not known, and which, in fact, may or may not occur.

The approach taken by Illinois' rules can be distinguished from and contrasted with that of the federal NESHAP rules, under 40 CFR Part 63. These rules address excess emissions during malfunction (and shutdown) or startup without the initial step required by Illinois' rules. This is because all sources are able to claim exclusion from an otherwise applicable standard during a malfunction or startup event. The validity of the claims is then subject to scrutiny by USEPA and the state enforcement authority, as to the acceptability of a source's claim that an incident should qualify for an exemption. That is, that the excess emissions could not be readily prevented and were not contrary to good air pollution control practices. In fact, this case-by-case scrutiny is the second step provided for in Illinois' regulations. However, violations of emissions standards in Illinois' air pollution control regulations at 35 IAC Subtitle B Chapter I Subchapter c are governed by the SIP approach.

For those units at this source for which malfunction/breakdown or startup authorization was sought under Illinois' SIP, the CAAPP permit application contained completed Forms 204-CAAPP and 203-CAAPP, respectively entitled Request To Continue To Operate During Malfunction and Breakdown and Request To Operate During Startup of Equipment. These forms seek the specific information required by the relevant state rules. Again, that information is an explanation of why continued operation is necessary; the anticipated nature, quantity and duration of emissions; and measures that will be taken to minimize the quantity and duration of emissions for malfunctions and breakdowns. It is a description of the startup procedure, duration and frequencies of startups, type and quantity of emissions during startups, and efforts to minimize emissions, duration and frequency for start-up. Accordingly, this source sought malfunction/breakdown as well as startup authorization in accordance with applicable state rules. The Illinois EPA reviewed these requests. Based on its review, the CAAPP Permit grants authorization to the source to make a claim of malfunction/breakdown or startup. That the CAAPP Permit affords such authorization, does not equate to an "automatic exemption." The grant of such initial authorization is fully consistent with long standing practice in Illinois permitting and enforcement. Due to the nature of coal-fired power plants and the inability to simply shutdown equipment or the level of hazards associated with improper start-up or shutdown, the source may experience excess emissions due to events that cannot be readily anticipated or reasonably avoided. However, the source is also fully aware that it may be held accountable for any excess emissions that occur regardless of any such authorization.

Neither the provisions in the SIP nor the provisions in the CAAPP Permit delineating the elements for a viable claim of malfunction/breakdown or startup translate into any advanced determination on excess emissions. Rather, together the regulations and the CAAPP Permit simply provide a framework whereby a source may have an opportunity to make a claim of malfunction/breakdown or startup, with the viability of such claim subject to specific review against the requisite requirements. Indeed, 35 IAC 201.265 clearly states that violating an applicable state standard even if consistent with any

expression of authority regarding a malfunction/breakdown or startup set forth in a permit shall only constitute a prima facie defense to an enforcement action for violation of said regulation. The malfunction/breakdown or startup authorization provided in the CAAPP Permit does not provide shields from state emission standards that may be violated during said events. Rather, the source is subject to the applicable standards on any malfunction/breakdown or startup authorization included within the permit. As a result, any excess emissions during these events would constitute violations potentially subject to enforcement action.

For any source that receives such authorization, the type of authorization (i.e., malfunction/breakdown or startup), the emission units for which authorization has been received, and the conditions under, and manner in which such authorization may be utilized are clearly set forth in the CAAPP Permit. The origin of these authorizations is 35 IAC 201.149.

4.4 Discussion for Emissions of Greenhouse Gases

On June 3, 2010, USEPA adopted rules for the initial permitting of major sources of emissions of greenhouse gases (GHG). See, 75 FR 31514-31608. Prompted by the earlier adoption of GHG emissions standards for motor vehicles under Title II of the CAA, the USEPA's rules implement a two-phased program for permitting major sources of GHG under Title V permit programs.²⁷ Annual Emission Reports (AER) submitted by Ameren for this source confirm that it is a major source for emissions of GHG. This fact is noted here merely for informational reasons and does not form the basis of any permitting revisions or changes to the CAAPP permit.

It can also be observed that the relevant federal rules require subject Title V sources to comply with any applicable GHG-related requirements that arise from other Clean Air Act programs.²⁸ Based on general knowledge, no emission standards or other regulatory obligations relating to GHG currently exist as "applicable requirements" for this source. The source is not known to have implemented projects triggering the resulting from the major source or major modification rules of the Prevention of Significant Deterioration program, nor is the source obligated to address the mandatory reporting rule for GHG, promulgated by USEPA in 2009 [see generally, 40 CFR Part 98], as an applicable requirement under the CAAPP. There are also no GHG-related requirements under the Act or contained in Illinois' SIP that apply to the source at this time. As explained above, these observations are noted here merely for information and do provide the basis of any revisions or changes to the CAAPP permit.

²⁷ The new rules apply the first phase of permitting to sources already subject to Title V by virtue of their conventional, non-GHG pollutants. As noted above, these sources are expected to address GHG in their permitting applications and to comply with any substantive requirements for GHG that have been established through other CAA programs such as PSD. The second phase of permitting that begins July 1, 2011, essentially applies the same requirements to sources who will become subject to Title V based on their GHG emissions alone (i.e., existing or newly constructed sources with a potential to emit of equal to or greater than 100,000 tons per year of CO₂e and 100 tons per year of GHG on a mass basis).

²⁸ See generally, PSD and Title V Permitting Guidance for GHG at pages 53-56.

ATTACHMENTS

Attachment 1: Planned Changes by Administrative Amendment

Introduction

Pursuant to Section 39.5(13) of the Act, the changes listed below are all of an administrative nature. The Act defines "administrative permit amendments" as a permit revision that can accomplish one or more of the changes listed in Section 39.5(13)(c) of the Act²⁹. All the planned administrative changes to the CAAPP permit for the source fall into the following categories:

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source; or
- Any other type of change which has been determined to be similar to those included above.

Pursuant to Section 39.5(13)(a) of the Act, neither notice nor an opportunity for public and affected State comment is required for the Illinois EPA to incorporate such revisions, provided it designates the permit revisions as having been made pursuant to the Administrative Amendment procedures in the CAAPP. Thus, the CAAPP source may implement the changes addressed in the request for such administrative permit amendment immediately upon submittal of the request. The changes identified in this Section are not covered by any permit shield in Section 39.5(7)(j) of the Act.

Cover Page - "Operation of":

The source is now referred to as the Coffeen Energy Center, consistent with Ameren's current terminology.

Cover Page - "Responsible Official":

The source's responsible official has been updated to the current official and the source's power plants are now called Energy Centers.

Cover Page - 3rd Paragraph

The permit now provides that any questions on the permit are to be directed to the CAAPP unit.

Cover Page - Permit Section Manager

The permit now reflects the current manager of the Permit Section.

Cover Page - IEPA Staff Initials

The initials of Illinois EPA staff now reflect current staff.

Condition 1.1

The source is now referred to as an Energy Center, consistent with Ameren's current terminology.

²⁹ It should be noted that the Illinois EPA has identified other changes in the initial CAAPP permit that would arguably constitute an administrative amendment as well. However, based on discussions with USEPA Region V, the Illinois EPA has taken the more conservative approach and provided for some of these changes to be minor or significant modification. Specifically, the changes relating to the revisions requiring more frequent monitoring or reporting by Ameren.

Condition 1.4

The source is now referred to as the Coffeen Energy Center, consistent with Ameren's current terminology.

Condition 7.1.1

The description of the boilers was updated to correctly reflect the boilers. It was also revised for clarification and proper grammar.

Condition 7.1.3(b)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.1.3(c)

The condition was revised to correctly identify the pulverizer as a crusher. The condition was also revised to correctly identify the applicable regulation of 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.1.9(d) (ii)

Correction in mistake in terminology. The referenced provision limits the hourly rate of emissions (lb/hr) and not the emissions relative to heat input (lb/million Btu).

Condition 7.1.9(h) (i)

The condition was revised to correctly identify the correct condition reference to Condition 7.1.9(b) (i) and not to Condition 7.2.9(b) (i).

Condition 7.1.10-2(e) (ii)

The condition was revised to correct the cross-reference, to Condition 7.1.4(f) (ii) and not to Condition 7.1.4(f) (ii) (B).

Condition 7.2.1

The condition has been revised because the subject units do not have any dust control equipment.

Condition 7.2.2

The purpose of this change was to clarify that the source did not have duplicate equipment, which could be inferred by the same equipment listing appearing under each categorical group of emission units. The listing did not change, i.e., there are no other pieces of equipment at the source other than those identified.

Condition 7.2.3(b)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.3.1

The condition was revised to remove references to collection devices because the subject emission unit does not utilize them.

Condition 7.3.3(b)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.3.3(b) (iii)

The condition was revised to correct the cross-reference, to Condition 7.3.9(e) and not to Condition 7.3.9(f).

Condition 7.3.6(a) (ii)

The condition was revised to correct the cross-reference, to Condition 7.3.9(b) and not to Condition 7.3.9(b) (i).

Conditions 7.4.1 & 7.4.2

The condition has been revised because the subject emission unit does not have any dust collection.

Condition 7.4.3(b)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.4.3(b) (iii)

The condition was revised to correct the cross-reference, to Conditions 7.4.9(e) and 7.4.10(b) and not to Conditions 7.3.9(e) and 7.3.10(b)

Condition 7.4.12(a)

The condition was revised to correct the cross-reference, to Condition 7.4.6(a) and not to Condition 7.3.6(a).

Condition 7.5.1

The description was revised to correctly describe the boiler as fired with distillate fuel oil fired, and not natural gas.

Condition 7.5.2

The description was revised to correctly describe the boiler as a distillate fuel oil fired boiler and not fired with natural gas.

Condition 7.5.3(b)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.5.3(b) (iii)

The condition was revised to correct the cross-reference, to Condition 7.5.10-2(a) (iii) and not to Condition 7.5.10-2(a) (i) (D).

Condition 7.5.3(c)

The condition was revised to correctly identify the relevant rule, 35 IAC 201.261 and not 35 IAC 201.161.

Condition 7.5.10-1(b) (i)

The condition was revised to correct the cross-reference, to Conditions 7.5.10-1(a) (i), (ii), or (iii) and not to Conditions 7.5.10-1(a) (i), (ii), or (ii).

Conditions 7.5.10-2(a) (iv) (A) and (B)

The condition was revised to correct the cross-reference, to Conditions 7.5.10-3(a) and not to Condition 7.7.10(c) (ii).

Condition 7.5.12(d)

The condition was revised to correct the cross-reference, as there is not a CO emission limit in Condition 7.5.6(b) (i).

Condition 7.6.12(b)

The condition was revised to correct the cross-reference, to Condition 7.6.6 and not to Condition 7.5.6.

Attachment 2: Planned Revisions to the Permit by Minor Modification

Introduction

Pursuant to Section 39.5(14) (a) of the Act, the planned changes listed below are all minor modification changes. The Act defines "minor permit" modification to mean a permit modification as listed in Section 39.5(14) (a) (i) of the Act. All the planned minor modification changes to the CAAPP permit for the source are not administrative amendment and meet the following criteria:

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject (i.e., a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Clean Air Act; and an alternative emissions limit approved pursuant to regulations promulgated under Section 112(i) (5) of the Clean Air Act);
- Are not modifications under any provision of Title I of the Clean Air Act; and
- Are not required to be processed as a significant modification.

Pursuant to Section 39.5(14) (a) (v) of the Act, the Agency may not issue a final revised permit by minor modification until after the 45-day review period for USEPA review has passed or USEPA has notified the Illinois EPA that it will not object to the issuance of the revised permit, whichever comes first, although the Agency can approve the permit modification prior to that time. Thus, the source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the change allowed by the preceding sentence, and until the Agency takes final action, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. If the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions which it seeks to modify may be enforced against it. The changes identified in this Section are not covered by any permit shield in Section 39.5(7) (j) of the Act.

The Illinois EPA has provided additional explanation below for those changes for changes whose classification, (i.e., minor or significant) may not immediately be evident.³⁰

³⁰ It should be noted that the Illinois EPA did identify other changes to the initial CAAPP permit for the source that would arguably also be minor modifications, specifically, changes relating to

Condition 5.5.1

The current maximum fee amount that Ameren must pay is no longer specified because the amount of the fee has changed.

Condition 5.6.2 (b)

The condition was reworded with language that is substantially equivalent but more amenable to Ameren.

Condition 5.6.2 (d)

This requirement was moved into Sections 7.2, 7.3, and 7.4 of the permit, where it is applicable, for clarity. For example, the condition could otherwise have been construed as applying to the coal-fired boiler in Section 7.1, which have no "control measures," as this term is used relative to this requirement.

Condition 7.1.5(a) (iii)

The reference to the coal pulverizer was removed because this Section covers the boiler and the coal pulverizer is covered in Section 7.3.

Condition 7.1.5(b)

The condition was revised to enhance the language that the source is conducting monitoring in accordance with the NSPS and the Acid Rain program. It should be noted that this condition does not make the boilers subject to the NSPS.

Condition 7.1.7(a) (ii)

This condition was revised for clarification and accuracy. The condition in the initial permit was not appropriately tailored to these particular boilers, so would not have had the intended effect.

Condition 7.1.7(e) (iii) (B)

This condition was revised for clarification. The condition is not meant to be restrictive to just the listed information. Rather, it is intended to give examples of the information to be available for review by the Illinois EPA.

Condition 7.1.7(e) (iii) (C)

Condition 7.1.7(e) specifies the contents of final reports from emission testing of the boilers, including the requirement in Condition 7.1.7(e) (iii) (C) to provide combustion system information and the levels of various pollutants from the flue gas. For the former, the condition required submission of data regarding the "settings" for the distribution of primary and secondary combustion air and the "target level" for oxygen (O₂) in the flue gas. For the latter, the condition required submission of the levels of CO, carbon dioxide (CO₂) or O₂, as recorded by diagnostic measurement.

This change relates to the appeal of Condition 7.1.6(a). Changes to Condition 7.1.7(e) are also needed to ensure consistency and avoid ambiguities in related terminology. In particular, settlement discussions revealed confusion regarding the exact nature of combustion information being reported (i.e., "settings" and "target level" of O₂) and, similarly, the nature of the levels of flue gas pollutants being reported (i.e., "levels" of CO, CO₂ or O₂). The reporting of only CO, which is measured by operational instrumentation on a boiler, is consistent with the goal of securing meaningful information relating to combustion efficiency and its attendant effects on CO emissions.³¹

reporting and recordkeeping. However, based on discussions with USEPA, a more conservative approach has been taken, addressing those changes as significant modifications to the permit.

³¹ A diagnostic measurement is a measurement that is typically made when troubleshooting a problem to gather data beyond the normal, operational measurements. An operational measurement is one that

This condition has been revised to clarify the combustion data that must be reported. The condition now requires the "calculated level of excess air in the flue gas". The simple rephrasing of the language retains the same substantive equivalence in terms of the qualitative information being sought and is consistent with fundamental approach to the earlier condition, which was to require the reporting of meaningful information regarding the operation of combustion systems. Indeed, the changes can be seen as expanding the data fields for combustion information reported as part of emissions testing and improves the qualitative value of the combustion information being reported.

Condition 7.1.7(e) (iii) (D)

This condition was revised for clarification. The condition is not meant to be restrictive to just the listed information. Rather, it is intended to give examples of the information to be available for review by the Illinois EPA.

Condition 7.1.7(e) (v)

This condition was revised to include the hourly opacity averages measured during testing.

Condition 7.1.9(a) (vi)

This condition was revised for clarity. As previously worded, the condition improperly presumed that adjustments and preventative and corrective measures would be necessary and occur during combustion evaluations.

Condition 7.1.9(c) (i)

This condition was revised to enhance practical enforceability.

Condition 7.1.9(d) (i)

This condition was revised to be practically enforceability.

Condition 7.1.9(d) (ii)

Correction in mistake in terminology. The referenced provision limits the hourly rate of emissions (lb/hr), and not the emissions relative to heat input (lb/million Btu).

Condition 7.1.9(e) (i)

This condition was revised to enhance practical enforceability.

Condition 7.1.9(h) (ii) (B)

This condition was revised to remove duplication, as similar records are required by Condition 7.1.9(h) (ii) (A).

Conditions 7.1.10-2(a) (iii) and (a) (iv)

New Condition 7.1.10-2(a) (iii) was added, as a requirements for reporting of deviations was absent from the original permit. As a consequence, former Condition 7.1.10-2(a) (iii) was renumbered to Condition 7.1.10-2(a) (iv).

Condition 7.1.10-2(d) (iii) - Note:

is taken on a regular basis, providing feedback on how the system is functioning and behaving. Illinois EPA needs to know, as part of the stack test, how the operation is performing at the time of the test in the event there is a need to make a comparison against a future non-compliant event or to aid in enforcement. Thus, the measurements needed in this condition are operational measurements, not diagnostic measurements.

The condition was revised to clarify that the source is conducting reporting in accordance with the NSPS and the Acid Rain program. It should be noted that this does not make the boilers subject to the NSPS.

Condition 7.2.6(a) (i)

The condition has been reworded based on the changes in Condition 5.6.2(d) and is now more amenable to Ameren. The substance of the condition did not change. The condition was also revised to create a definition for "established control measures" to provide clarity and enhance practical enforceability.

Conditions 7.2.7(a) (i), 7.3.7(a) (i), and 7.4.7(a) (i)

The phrase "representative weather conditions" was removed to avoid a potential conflict between the permit and Method 9 with respect to the performance of opacity observations. These observations must be conducted using Method 9, which specifies acceptable weather conditions during which such observations can be conducted. The phrase during "representative weather conditions" in the condition could be have construed as potentially requiring opacity observations during weather conditions that would be inconsistent with use of Method 9.

Condition 7.2.8(a)

Condition 7.2.8(b) in the original CAAPP permit contained inspection requirements for the dust collection equipment on coal handling operations at the sources. Settlement discussions revealed that, in fact, such equipment is not present. Accordingly, the requirement of this condition, to inspect non-existent equipment, has been removed.

Condition 7.2.8(b)

The condition was revised because the CAAPP permit acted arbitrarily in specifying the individual that could do the required inspections of the subject operations. In addition, the source does not utilize control devices for these operations and the reference to this was deleted.

Conditions 7.2.9(a) and (b)

The condition has been revised because the subject units do not have any dust collection equipment.

Condition 7.2.9(d)

The condition requiring specific list of records was revised to remove duplicative records after removing the requirements for control devices.

Condition 7.2.9(e)

The condition was revised to merged duplicative records after removing the requirements for control devices.

Condition 7.2.9(e) (ii)

Condition 7.2.9(e) (vii) was deleted because it required records of excess emissions related to applicable requirements that appear in Condition 7.2.4. However, there are no PM requirements in Condition 7.2.4.

Condition 7.2.9(e) (vii)

This condition was duplicative and was deleted. This condition required that records of excess PM emissions that occur during periods when "control measures were not functioning properly" be maintained, i.e., during malfunctions. Excess emissions during malfunctions are "deviations" and records are already required to be maintained and reported pursuant to Condition 7.2.10.

Condition 7.2.9(f)

The condition was revised to no longer duplicate records in Condition 7.2.9(e), after removing the requirements for control devices. The requirement for a maintenance and repair log stayed in place. The source does not have any control devices but rather control measures. The old Conditions 7.2.9(e) and (f) had virtually the same language except that Condition 7.2.9(e) addressed records to be kept for malfunctions/breakdowns when control measures were not in place, and Condition 7.2.9(f) required virtually the same records to be kept for malfunctions/breakdowns for the associated process equipment and control devices. These two subsections were combined into Condition 7.2.9(e), and references to control devices were deleted.

Condition 7.2.9(g)

The condition was revised to include records for the reason for observations, as such observations must be conducted more frequently and for various reasons. This was necessary since observations for visible emissions, by Method 22, was added to the inspections required by Condition 7.2.8(b).

Condition 7.2.11(d)

The condition was revised because it incorrectly referred to PM emissions, rather than visible emissions.

Condition 7.3.1

The condition was revised to remove references to collection devices as the subject operation unit is not equipped with such devices.

Condition 7.3.6(a) (i)

The condition has been reworded based on the changes in Condition 5.6.2(d) and is now more amenable to Ameren. The effect of the condition did not change. The condition was also revised to create a definition for "established control measures" to enhance practical enforceability.

Conditions 7.3.7(a) (i) (A), (B), and (C)

The phrase "representative weather conditions" was removed to avoid a potential conflict between the permit and Method 9 with respect to the performance of opacity observations. These observations must be conducted using Method 9, which specifies acceptable weather conditions during which such observations can be conducted. The phrase during "representative weather conditions" in the condition could be construed as potentially requiring opacity observations during weather conditions that would be inconsistent with use of Method 9.

Conditions 7.3.7(a) (iii), (iv), (v)

The conditions were revised for accuracy. Observations are required, not tests.

Condition 7.3.7(b) (ii)

The condition was revised to add Method 17 as this is the test method that would appropriately be used for testing PM emissions of the subject units.

Condition 7.3.9(a)

Condition 7.3.9(a) addressed monitoring requirements for dust collection equipment. As discussed above, dust collection equipment is not present on the subject units.

Condition 7.3.9(b)

The condition has been reworded based on the changes discussed for Condition 5.6.2(d) above.

Condition 7.3.9(d)

The condition requiring specific list of records was revised to remove duplicative records after removing the requirements for control devices.

Conditions 7.3.9(e) and (f)

The original Condition 7.3.9(e) contained requirements to maintain records for events related to malfunction and breakdown, specifically for the underlying processes. Original Condition 7.3.9(d) required virtually the same records for events related to malfunction and breakdown, specifically for established control measures.

The records provisions of Condition 7.3.9(e) were combined with Condition 7.3.9(d), leaving only maintenance requirements related to the malfunction and breakdown in new Condition 7.3.9(e).

Condition 7.3.9(g)

The condition was revised to include records for the reason for observations, as such observation must be conducted more frequently and for various reasons. This was necessary since observations for visible emissions, by Method 22, was added to the inspections required by Condition 7.3.8(b).

Condition 7.3.11(d)

The condition was revised because it incorrectly referred to PM emissions, rather than visible emissions.

Condition 7.4.6(a) (i)

The condition has been reworded based on the changes in Condition 5.6.2(d) and is now more amenable to Ameren. The effect of the condition did not change. The condition was also revised to create a definition for established control measures to enhance practical enforceability.

Conditions 7.4.9(a) and (b)

The conditions were revised to remove references to collection devices the subject operation is not equipped with such devices.

Condition 7.4.9(d)

The condition requiring specific list of records was revised to remove duplicative records after removing the requirements for control devices.

Conditions 7.4.9(e) and (f)

The condition was reworded with language that was more amenable to Ameren but does not change the meaning or effect of the condition.

Condition 7.4.9(g)

The condition was revised to include necessary records to be able to distinguish the reason for the Method 9 as a result of changes to monitoring in Condition 7.4.8 and the use of Method 9 more frequently and for various reasons. This was necessary since Method 22 was added to the inspections in Condition 7.3.8(b).

Condition 7.4.10(b) (i) (A)

The condition was revised to remove duplicative information. Opacity is the surrogate for PM and reporting for PM is addressed by Condition 7.4.10(a) (ii). Incorrect assumptions were made regarding the response time reasonably needed for the source to take corrective actions.

Condition 7.4.11(c)

The condition was revised because it incorrectly referred to PM emissions, rather than visible emissions.

Condition 7.5.3(b)

The condition was revised to correctly identify the relevant rule, i.e., only 35 IAC 212.206 and not 35 IAC 212.206 and 212.207.

Condition 7.5.3(b) (ii)

The condition was revised to remove excess language inadvertently included in the condition.

Condition 7.5.4(b)

The condition was revised to correctly identify the relevant rule, i.e., only 35 IAC 212.206 and not 35 IAC 212.206 and 212.207.

Condition 7.5.4(c)

The condition was revised to correctly identify the relevant rule, i.e., 35 IAC 214.122(b) and not 35 IAC 214.122(b) and 214.162.

Condition 7.5.6(a) (i)

The condition was revised to correctly describe the boiler as being fired with distillate fuel oil, and not natural gas.

Condition 7.5.7-1(a) (v) (C)

The condition was revised because the boiler is fired with distillate fuel oil, so information in scf/hr, as would be appropriate with natural gas, is not relevant.

Condition 7.5.9(a)

The condition was reworded with language that was more amenable to Ameren but does not change the meaning or effect of the condition.

Condition 7.5.9(b) (iv)

The condition was revised because the boiler is fired with distillate fuel oil, so information in scf/hr, as would be appropriate with natural gas, is not relevant.

Condition 7.5.9(c)

The condition was revised to correctly identify the relevant rule.

Condition 7.5.9(d)

This condition was revised to clarify recordkeeping related to startup.

Condition 7.5.9(d) (i) and (ii) (A)

These conditions were revised to no longer duplicate records that are required by Condition 7.5.9(a) (i).

Condition 7.5.9(e)

This condition was revised to clarify recordkeeping related to malfunction and breakdown.

Condition 7.5.9(e) (i)

This condition was revised to no longer duplicate records that are required by Condition 7.5.9(a) (ii).

Condition 7.5.9(e) (ii)

This condition was revised to remove duplicated records that are required by Condition 7.5.9(a)(ii) and to remove opacity because violations of the opacity standard are not provided for the subject unit by the permit.

Condition 7.5.10-2(b)(iii)

The condition was revised because the boiler is not subject to the NSPS.

Condition 7.5.10-3(a)(i)

Correction of duplication of information. Opacity is the surrogate for PM and PM is being reported in Condition (a)(ii). Assumptions were made regarding the response time necessary for source to take corrective action.

Condition 7.5.10-3(a)(ii)

The condition was revised to insert the missing word "days".