Statement of Basis

For the Planned Issuance of a Revised Clean Air Act Permit Program (CAAPP) Permit Through Reopening and Significant Modification For:

Source: Kincaid Power Station
Owner: Kincaid Generation, LLC
Operator: Kincaid Energy Services Co., LLC
Permittee: Kincaid Generation, LLC

Illinois EPA Source ID No.: 021814AAB
Federal ORIS* Code for the Source: 876
CAAPP Permit No.: 95090078

Permitting Authority:
Illinois Environmental Protection Agency
Bureau of Air, Permit Section

July 21, 2016

* Office of Regulatory Information Systems (ORIS)
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PREFACE

The purpose of this Statement of Basis is to discuss the development and legal basis for certain revisions to the Clean Air Act Permit Program (CAAPP)\(^1\) permit for the Kincaid Generating Station (Kincaid) that are now planned. Through a reopening proceeding, certain revisions to the CAAPP permit for this source are planned to address applicable requirements under the Clean Air Act that are not addressed in the current CAAPP permit. This reopening proceeding and the resulting revisions to the CAAPP permit that are now planned would be the final step in the settlement of the previous permit appeal before the Illinois Pollution Control Board for the CAAPP permit that was initially issued by the Illinois EPA for this source. In addition, the Illinois EPA is planning to fully approve the Compliance Assurance Monitoring (CAM) Plans for the coal-fired boilers, which plans were only conditionally approved in the CAAPP permit for Kincaid that was issued by the Illinois EPA on February 05, 2015. Revisions are also planned to certain provisions of the CAAPP permit to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and to make other refinements now being requested by the Permittee. Revisions are also planned to address certain requirements of a USEPA Consent Decree entered on July 17, 2013, and a related construction permit issued December 10, 2015.

This Statement of Basis also addresses the planned issuance of a revised Acid Rain Program Permit for the two coal-fired electrical generating units at Kincaid. This revised permit would take the place of the Acid Rain Permit that is Attachment 5 of the current CAAPP permit for the facility.

A Statement of Basis is a document that the Illinois EPA must prepare as part of the public comment period for the planned CAAPP permit of a renewal, significant modification and/or reopening of a CAAPP permit. The statement of basis is intended to aid the public in understanding the relevant facts and legal basis of permitting actions regarding planned CAAPP permits.\(^2\) In this instance, this Statement of Basis addresses the reopening and significant modification revisions to the CAAPP permit for the Kincaid planned revised CAAPP permit.

This Statement of Basis is only explanatory in nature and is not enforceable. The Statement of Basis also does not provide a shield from enforcement actions or 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 (Act) or implementing regulations thereunder.

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\(^1\) The CAAPP is Illinois’ operating permit program for major sources of emissions established to meet the requirements of Title V of the federal Clean Air Act (CA Act) and 40 CFR Part 70; it is found at Section 39.5 of the Illinois Environmental Protection Act [415 ILCS 5/39.5].

\(^2\) The Illinois EPA must prepare Statements of Basis pursuant to Section 39.5(8)(b) of Illinois’ Environmental Protection Act (Act), 502(a) of the Clean Air Act and 40 CFR 70.7(a)(5). Along with the planned permit prepared for public comment, “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 Kincaid Power Station (Kincaid) is a coal power plant with two coal-fired electrical generating units. The initial CAAPP3 permit for Kincaid was issued by the Illinois EPA in September 2005. The permit addressed the applicable emission standards and requirements that existed at the time the permit was issued.4 In a subsequent permit appeal to the Illinois Pollution Control Board, the applicability of certain legal requirements and the imposition of certain requirements for emission testing, monitoring recordkeeping and reporting in the CAAPP permit were challenged. In the years since the filing of the appeal, the initial permit was stayed in its entirety. The presence of the stay, which was a consequence of the Illinois administrative review process, prevented the initial permit from becoming effective. The earliest steps to advancing the development of an appropriate CAAPP permit for this source was to provide for the effectiveness of a CAAPP permit and the resolution of the permit appeal. These steps were completed on February 05, 2015, when a revised CAAPP permit was issued for Kincaid, and on July 16, 2015, when the Board granted a voluntary dismissal of the appeal by the source. The CAAPP permit for Kincaid can and is now being brought up-to-date by the Illinois EPA through a permit reopening proceeding.

This Statement of Basis supports the revisions to the CAAPP permit for the Kincaid Power Station that are now planned by the Illinois EPA and for which a public comment period is required before any such revisions are made. Chapter 1 of this Statement of Basis provides historical background to the planned permitting action. Chapter 2 provides the factual basis for these planned permit actions. Chapter 3 provides a narrative discussion for the specific changes that are planned to the CAAPP permit in the reopening proceeding so that the permit would address all applicable requirements under the Clean Air Act. Chapter 4 discusses the planned full approval of the source’s Compliance Assurance Monitoring (CAM) Plan for the particulate matter (PM) emissions of

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3 Title V permits are a means of assembling and setting forth the various air pollution control requirements established under the CA Act for major sources of emissions and certain other sources in particular categories. 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 statutory authority for Illinois’s CAAPP is found at Section 39.5 of the Environmental Protection Act (Act). The CAAPP was given final full approval by USEPA on December 4, 2001 (see 66 FR 62946).

4 Kincaid is subject to a variety of federal and state emission standards and emission control requirements, which are the legal basis for certain conditions in this CAAPP permit that limit emissions. Certain other requirements have their origin in construction permits issued for new or modified emission units at the source. The CAAPP itself identifies 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 are also specified and referenced in the conditions of the permit. Conditions that have their origin in a construction permit are also identified. In this regard, the Illinois EPA’s practice in CAAPP permits is to identify requirements that are carried over from an earlier construction permit into a new or renewed CAAPP Permit as “TI” conditions (i.e., Title I conditions). Because the underlying authority for provisions in construction permits comes from Title I of the CA Act and their initial establishment in Title I Permits, the effectiveness of TI Conditions derives from Title I of the CA Act rather than being linked to Title V of the CA Act.
the boilers, including a review of the results of the emissions testing that was completed as required by the conditional approval of this CAM Plan. Chapter 5 discusses other planned revisions to certain elements of the Periodic Monitoring for the boilers and fly ash handling to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois. Chapter 6 provides general background on the emission units at the Kincaid plant and requirements under the current CAAPP permit.

This Statement of Basis also addresses the planned issuance of a revised Acid Rain Program Permit for the two coal-fired electrical generating units at Kincaid. This revised permit, which would take the place of the permit that is attached to the current CAAPP permit for Kincaid, is addressed in Chapter 1.6 of this Statement of Basis.
1.1 Historical Background

Kincaid Generation, LLC (the “Permittee”) owns a coal-fired electric power plant known as the Kincaid Power Station (“Kincaid”). This power plant is located Four Miles West of Kincaid, Illinois on Route 104. In addition to coal-fired boilers, this plant has ancillary equipment and operations, including coal handling, coal processing, fly ash handling, an auxiliary boiler, dry sorbent material handling equipment and gasoline storage.

The Permittee filed an application with the Illinois EPA on September 7, 1995 for a CAAPP permit for Kincaid. The application was assigned Application No. 95090078. Following a public comment period with opportunity for comments from the public and review of a proposed CAAPP permit by USEPA, the Illinois EPA issued a CAAPP permit for Kincaid on September 29, 2005.

On November 3, 2005, the Permittee petitioned Illinois’ Pollution Control Board (Board) for review of the CAAPP permit issued by the Illinois EPA for Kincaid. In particular, the Permittee challenged the inclusion of certain specific terms and conditions in this permit, as identified in the petition. The Permittee 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. The Permittee 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 November 17, 2005, the Board accepted the Permittee’s appeal petition, and on February 16, 2006, the Board recognized that the issued CAAPP permit was stayed in its entirety as a matter of law.

The parties engaged in negotiations, which ultimately resulted in settlement. The Illinois EPA prepared a draft of a revised CAAPP permit that reflected the changes to the permit agreed to in settlement discussions and took the steps needed to process the draft revised permit. On February 5, 2015, the Board granted a joint motion to lift the stay of uncontested conditions, allowing the initial permit to go into effect, but with contested conditions remaining stayed. On February 5, 2015, the Illinois EPA issued a revised CAAPP permit for Kincaid that reflected the negotiated settlement of the appeal of the initial permit.

1.2 The Current CAAPP Permit Reopening Proceeding

In conjunction with the issuance of the current CAAPP permit, the Illinois EPA initiated a formal reopening of this permit under the CAAPP’s procedures for reopening, as authorized by Section 39.5(15)(a)(i) of the Act. This process began on March 9, 2015. The purpose of this reopening proceeding is to address additional requirements to the CAAPP permit, i.e., requirements under the Clean Air Act that have become applicable to Kincaid since the original permit issuance in 2005. For the coal-fired boilers, the following regulations have been identified as needing to be addressed in the reopening proceeding: Best Available Retrofit Technology (BART), the Illinois Mercury Rule (35 IAC Part 225); the Mercury and Air Toxics Standards (MATS), 40 CFR 63 Subpart UUUUU; and the Cross-State Air Pollution Rule (CSAPR), 40 CFR Part 97 Subparts AAAAA, BBBBB and CCCCC. The applicable requirements set by construction permits
issued since 2005 for projects at Kincaid will also be addressed in the reopening proceeding.

The permit revisions addressed by this permitting action are described in detail in Chapter 3 below. As provided by Section 39.5(15)(c) of the Act, proceedings for reopening a permit must adhere to the “same procedures” that apply to initial issuance of a CAAPP permit. These procedures include the preparation of a planned CAAPP permit and accompanying Statement of Basis, and a public comment period, followed by opportunity for review by USEPA. In addition, a reopened permit does not provide for a comprehensive review of the permit, as would occur for an initial or renewed CAAPP permit, but instead only affects the parts of the permit addressed by the reopening.

As mentioned above, the planned revisions to the CAAPP permit have resulted in the preparation of a draft permit and this accompanying document. The planned revisions to the permit are being subjected to public participation and will then undergo review by USEPA in accordance with Sections 39.5(8)(a) and (9) of the Act. Unless the public comment period on this draft revision of the CAAPP permit is extended, the public comment period will close on August 21, 2016.

1.3 Planned Full Approval of the CAM Plan for PM Emissions of the Boilers

The Illinois EPA is also planning to issue a revised CAAPP permit for Kincaid that would fully approve the Permittee’s Compliance Assurance Monitoring (CAM) Plans for Kincaid’s coal-fired boilers for PM emissions. As discussed in Chapter 4 of this document, the Permittee has complied with all provisions of the conditional approval of the CAM Plan, including PM testing, data analysis and submission of an application for Significant Modification of the CAAPP permit to take final action on the CAM Plans. The Permittee submitted the application to Illinois EPA on May 22, 2015. The Illinois EPA has found that the CAM Plan submitted by the Permittee now fully satisfies the applicable requirements in 40 CFR 64.6. The Illinois EPA has also determined that the monitoring is sufficient to provide data that satisfy the requirements of 40 CFR Part 64 and confirms the appropriateness of the selected indicator ranges to satisfy 40 CFR 64.3(a)(2) and (3), as discussed in detail in Chapter 4 of this document. These planned revisions to the permit are also being subjected to public participation and review by affected States and will then undergo review by USEPA.

1.4 Other Planned Revisions to Provisions of the CAAPP Permit

The Permittee has also submitted an application requesting certain revisions to the provisions of the CAAPP permit, including certain requirements for Periodic Monitoring in the current CAAPP permit. These revisions involve elements of Periodic Monitoring (i.e., requirements for emission testing, opacity observations, inspections, recordkeeping and reporting) that are not explicitly required by applicable rules but were previously determined by the Illinois EPA to be appropriate to ensure compliance with applicable substantive requirements in the permit. Based on further information and evaluation, the Illinois EPA

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5 The draft Reopening of the CAAPP permit and this Statement of Basis have been posted on and are available at both, Illinois EPA and USEPA’s website: http://www.epa.state.il.us/public-notices/http://www.epa.gov/reg5oair/permits/ilonline.html
has now determined that certain revisions to be these requirements are appropriate, as have now been requested by the source. These revisions would reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and other substantive refinements to the provisions of the permit now being requested by the Permittee. The Illinois EPA has determined that it is appropriate to make these revisions to the CAAPP permit requested by the Permittee, as discussed in detail in Chapter 5 of this document.

These revisions would be made using the procedures for significant modification as they potentially involve significant changes in existing monitoring permit terms or conditions, or relaxation of reporting or recordkeeping requirements and do not qualify as either minor permit modifications or as administrative permit amendments. As provided by Section 39.5(14)(c)(iii) of the Act, proceedings for significant permit modifications must meet the same requirements that apply to initial issuance or renewal of a CAAPP permit, including public participation, review by affected States, and review by USEPA.

1.5 Parallel Permitting Actions

In addition to the planned revisions to the CAAPP permit for Kincaid pursuant to the reopening proceeding, to provide full approval of the CAM Plan and to update certain requirements for Periodic Monitoring, the Illinois EPA is planning to make certain other revisions to the current CAAPP permit through the procedures for minor modifications and administrative amendment.

The additional revisions that will be addressed using the procedures for minor modification 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 Attachment 1 of this Statement of Basis. The CAAPP does not provide for public participation on planned minor modifications of CAAPP 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.

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 the CAAPP permit using the procedures for administrative amendment are described in Attachment 2 of this Statement of Basis. The CAAPP does not provide for public participation on planned 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.

1.6 Issuance of a Revised Acid Rain Program Permit for the Kincaid Power Station

Under the federal Acid Rain Program, the Permittee has applied for a revised Acid Rain Permit for Kincaid. The purpose of the Acid Rain Program, which was established by Title IV of the Clean Air Act, is to achieve significant reductions in emissions of sulfur dioxide (SO₂) and nitrogen oxides (NOₓ) from fossil-fuel fired electrical generating units as related to the contribution of
these emissions to acid rain. To achieve this objective for coal-fired power plants, the program employs a market-based approach to reduce SO2 emissions and traditional emission standards for NOx emissions.

The Illinois EPA has determined that it is appropriate to issue a revised Acid Rain Program Permit for Kincaid, as discussed further in Chapter 6 of this document. The issuance of this revised Acid Rain Permit must also be subject to public participation and review by any affected States and then undergo review by USEPA. In addition, the revised Acid Rain Permit would take the place of the Acid Rain Permit that is included as Attachment 5 of the current CAAPP permit for Kincaid, also contributing to bringing the CAAPP Permit for Kincaid up to date. Accordingly, the Illinois EPA is processing the draft of this revised Acid Rain Program Permit at the same time as other planned revisions to the CAAPP permit pursuant to the reopening proceeding.
CHAPTER 2 – FACTUAL BASIS FOR THE PLANNED PERMIT ACTION

2.1 Description of the Source

At the Kincaid Power Station, two coal-fired boilers are operated to generate electrical power. This facility is located Four Miles West of Kincaid, Illinois on Route 104. The area in which this facility is located has not been identified as posing a potential concern for consideration of Environmental Justice.

SIC Code: 4911
Location: Christian County

The revised CAAPP permit for Kincaid planned by the Illinois EPA would address the following emission units and operations at the facility, in addition to the insignificant activities that are present at this facility.

<table>
<thead>
<tr>
<th>Emission Unit(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Units Currently Addressed by the Permit</td>
<td></td>
</tr>
<tr>
<td>Coal Boiler 1 (BLR-1)</td>
<td>Babcock &amp; Wilcox Boiler</td>
</tr>
<tr>
<td>Coal Boiler 2 (BLR-2)</td>
<td>Babcock &amp; Wilcox Boiler</td>
</tr>
<tr>
<td>Coal Handling Equipment</td>
<td>Coal Receiving, Transfer and Storage Operations</td>
</tr>
<tr>
<td>Coal Processing Equipment</td>
<td>Coal Crushing Operations</td>
</tr>
<tr>
<td>Fly Ash Handling Equipment</td>
<td>Equipment for Handling and Loadout of Fly Ash from the Coal Boilers</td>
</tr>
<tr>
<td>Auxiliary Boiler</td>
<td>Natural Gas-Fired Auxiliary Boiler</td>
</tr>
<tr>
<td>Gasoline Storage Tank</td>
<td>Gasoline Storage Tank – 500 Gallon</td>
</tr>
<tr>
<td>Additional Emission Units to Be Addressed by the Planned Revised Permit</td>
<td></td>
</tr>
<tr>
<td>Sorbent Injection Handling Equipment</td>
<td>Equipment for Handling Sorbent Associated with the DSI Flue Gas Desulfurization (FGD) Systems Installed on the Coal Boilers</td>
</tr>
</tbody>
</table>

2.2 Ambient Air Quality Status for the Area

Kincaid is located in an area that is currently designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants, including nitrogen dioxide (NO₂), particulate matter₂.₅ (PM₂.₅), particulate matter₁₀ (PM₁₀), sulfur dioxide (SO₂), carbon monoxide (CO), ozone and lead. (See 40 CFR 81.314, Attainment Status Designations: Illinois)

2.3 Major Source Status

PM₂.₅ and PM₁₀ are particles with aerodynamic diameters less than or equal to 2.5 and 10 microns, respectively.
Kincaid requires a CAAPP permit because it is considered a major source for emissions of the following regulated pollutants: nitrogen oxides (NO\textsubscript{x}), volatile organic material (VOM), PM\textsubscript{10}, PM\textsubscript{2.5}, SO\textsubscript{2}, CO and hazardous air pollutants (HAP). A major source of emissions is required to have a CAAPP permit by Section 39.5(2)(a)(i) of the Act.\footnote{The source has voluntarily submitted data for actual emissions of GHGs from this source in its Annual Emission Reports (AER). However, Kincaid 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. The planned CAAPP permit would not relieve the source from its obligations for reporting under the Mandatory Reporting Rule.}

The facility also requires a CAAPP Permit as an “affected source” for the purposes of Acid Deposition Control, Title IV of the Clean Air Act, as provided by Section 39.5(2)(a)(iii) of the Act.

The actual annual emissions of regulated pollutants from Kincaid, as reported by the source in its Annual Emission Reports submitted to the Illinois EPA, are provided below:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Reported Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>CO</td>
<td>794.9</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>1,706.0</td>
</tr>
<tr>
<td>PM</td>
<td>244.5</td>
</tr>
<tr>
<td>SO\textsubscript{2}</td>
<td>2,366.2</td>
</tr>
<tr>
<td>VOM</td>
<td>174.4</td>
</tr>
<tr>
<td>CO\textsubscript{2}</td>
<td>5,759,736.7</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.0185</td>
</tr>
<tr>
<td>Hydrogen Chloride (HCl)</td>
<td>20.8</td>
</tr>
<tr>
<td>Hydrogen Fluoride (HF)</td>
<td>33.0</td>
</tr>
</tbody>
</table>

2.4 Fee Schedule

Kincaid’s permitted emissions of relevant pollutants for purposes of the annual site fees under the CAAPP are listed below:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Permitted Emissions (Tons/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOM</td>
<td>400</td>
</tr>
<tr>
<td>SO\textsubscript{2}</td>
<td>4,400</td>
</tr>
<tr>
<td>PM</td>
<td>1,100</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>3,500</td>
</tr>
<tr>
<td>HAPs, not included in VOM or PM</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>9,600</td>
</tr>
</tbody>
</table>
2.5 Construction Permits

The construction permits listed below, issued since October 2005, were reviewed during the development of the planned CAAPP permit for Kincaid. Any applicable requirements that originated in these construction permits are incorporated into the draft of the planned permit.

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Date Issued</th>
<th>Date Revised</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>08070010</td>
<td>9/26/2008</td>
<td></td>
<td>Sorbent (ACI) Injection Systems for Unit 1 and 2 Boilers</td>
</tr>
<tr>
<td>09050022</td>
<td>6/24/2011</td>
<td></td>
<td>Control Program for Mitigation of Visibility Impairment (BART)</td>
</tr>
<tr>
<td>11120041</td>
<td>3/29/2012</td>
<td>2/19/2016</td>
<td>Dry Sorbent Injection Systems for Units 1 and 2</td>
</tr>
<tr>
<td>13050042</td>
<td>6/27/2013</td>
<td></td>
<td>Modification of Fly Ash Handling System</td>
</tr>
<tr>
<td>14060006</td>
<td>12/10/2015</td>
<td></td>
<td>Emission Control Program for Kincaid Units 1 and 2, including PM-CEMS</td>
</tr>
<tr>
<td>15080035</td>
<td>10/16/2015</td>
<td></td>
<td>Fuel Additives System - CyClean</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Type</th>
<th>CAAPP Permit Condition</th>
<th>Reason for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>08070010</td>
<td>TIR</td>
<td>7.1.9(b) (v) (A)</td>
<td>Operating records for sorbent usage would have no longer been required after 2013 when the source began complying per 35 IAC 225.233(d).</td>
</tr>
</tbody>
</table>

The construction permits listed below, issued prior to 2005, were reviewed during the development of the issued CAAPP permit and are listed for informational purposes. Any applicable requirements that originated from these permits were incorporated as appropriate into the current CAAPP permit.

<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Date Issued</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>92010005</td>
<td>4/24/1992</td>
<td>New Stack for Kincaid Units 1 and 2</td>
</tr>
<tr>
<td>97080088</td>
<td>10/05/1999</td>
<td>2 Pulse Jet Baghouses and Other Misc. Projects</td>
</tr>
<tr>
<td>00020081</td>
<td>3/30/2000</td>
<td>OFA System Unit 1</td>
</tr>
<tr>
<td>00030047</td>
<td>4/21/2000</td>
<td>OFA System Unit 2</td>
</tr>
<tr>
<td>01030069</td>
<td>8/13/2001</td>
<td>SCR for Unit 2</td>
</tr>
<tr>
<td>01050009</td>
<td>8/13/2001</td>
<td>SCR for Unit 1</td>
</tr>
<tr>
<td>03120020</td>
<td>2/10/2004</td>
<td>ESP Optimization System</td>
</tr>
</tbody>
</table>

The construction permits listed below have been withdrawn at the request of the Permittee, and are listed for informational purposes. They were withdrawn for various reasons such as temporary emission units, tests or trials of pollution control methods or equipment, or were never constructed.
<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Reason</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>97100088</td>
<td>Withdrawn</td>
<td>Nebraska Auxiliary Steam Boiler</td>
</tr>
<tr>
<td>07060076</td>
<td>Withdrawn</td>
<td>ACI System</td>
</tr>
<tr>
<td>09080006</td>
<td>Withdrawn</td>
<td>Fuel Additive Trial Burn</td>
</tr>
<tr>
<td>09080047</td>
<td>Withdrawn</td>
<td>DSI Trial</td>
</tr>
<tr>
<td>10040008</td>
<td>Withdrawn</td>
<td>Fuel Additive System for Mercury Control</td>
</tr>
<tr>
<td>10120013</td>
<td>Withdrawn</td>
<td>Refined Coal</td>
</tr>
<tr>
<td>12070047</td>
<td>Withdrawn</td>
<td>Additive Injection System for Units 1 and 2</td>
</tr>
</tbody>
</table>
CHAPTER 3 – PLANNED CHANGES TO THE CAAPP PERMIT THROUGH REOPENING

Introduction

The changes described below are planned to be made as part of the reopening proceeding for the CAAPP permit for Kincaid.8

Changes in Section 2 of the Permit: List of Abbreviations and Acronyms used in this Permit

Condition 2.0

Additional abbreviations and acronyms that would be used in the revised CAAPP permit would be added to Condition 2.0, including ACI (Activated Carbon Injection), BART (Best Available Retrofit Technology), CAIR (Clean Air Interstate Rule), CMS (Continuous Monitoring System(s)), CSAPR (Cross-State Air Pollution Rule), DSI (Dry Sorbent Injection), FGD (Flue Gas Desulfurization), GWh (Gigawatt-Hour), MATS (Mercury And Air Toxics Standards), MWh (Megawatt-Hour), PM2.5 (Particulate Matter2.5), TBtu (Trillion Btu) and TR (Transport Rule).

Changes in Section 3 of the Permit: Conditions for Insignificant Activities

Condition 3.1.2

An ACI Silo with bin vent and a CyClean Fuel Additives System Test Facility would be added to the list of insignificant activities, reflecting the addition of this equipment since 2005. Sodium Hypochlorite Storage “Tank” would be listed as “Tank(s)”, since the Permittee may use various storage methods, such as multiple small portable tanks or totes, for such storage.

Changes in Section 5.0: Overall Source Conditions

Condition 5.1.3

The source is considered a single source with Pawnee Transloading Company, Inc., I.D. No. 021814AAF, located at Route 104, 3 miles east of Pawnee, IL. Pawnee Transloading Company was issued a CAAPP permit (13050031) on September 17, 2014.

Condition 5.2.4

This condition would be updated to reflect that the source is now required to complete a Risk Management Plan due to ammonia storage tanks for the SCR systems on the boilers.

Condition 5.9

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8 Pursuant to Section 39.5(14)(c) of the Act, “Proceedings regarding a reopened CAAPP permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.”
This condition would have required the Permittee to provide certain information to the Illinois EPA in advance of, or contemporaneous with, this permit reopening to assist the Illinois EPA if the permit was not reopened within 32 days after issuance of the current CAAPP permit. This requirement is now moot and would be removed from the CAAPP permit.

Condition 5.10

This condition provided information concerning when certain periodic monitoring and reporting had to be completed depending on the date the condition became effective. This is because the current permit did not become effective until it was issued in 2015. Since this has already occurred, the requirements would be removed.

Changes in Section 6.0: Conditions for Emissions Control Programs

Section 6.1 NOX Trading Program

Section 6.1 would be removed from the permit because the NOX Trading Program addressed by 35 IAC 217 Subpart W no longer exists. The requirements under the program expired in 2009.

Section 6.3 Cross-State Air Pollution Rule

On July 6, 2011, the USEPA finalized the rule known as the Cross-State Air Pollution Rule (CSAPR). CSAPR requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states.

CSAPR requires a total of 28 Eastern and Midwestern states to reduce annual SO2 emissions, annual NOX emissions and/or ozone season NOX emissions to assist in attaining the 1997 ozone and fine particle and 2006 fine particle National Ambient Air Quality Standards (NAAQS). CSAPR took effect January 1, 2015 for SO2 and annual NOX, and May 1, 2015 for ozone season NOX.

CSAPR includes several emissions trading programs that require affected EGUs to hold emission allowances sufficient to cover their emissions of nitrogen oxides (NOx) and/or sulfur dioxide (SO2) in each compliance period. For each trading program and compliance period, the rule establishes overall state “budgets” representing the maximum number of emission allowances that may be allocated to the group of affected EGUs in each covered state. Annual SO2 allocations for the two affected EGUs (combined) at Kincaid are 16,491 tons per year in 2015 and 2016 and 8,597 tons per year in 2017 through 2020. Annual NOX allocations

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9 The NOx Trading Program has been made obsolete by the USEPA’s adoption of the Cross-State Air Pollution Rule (CSAPR).

10 The timing of CSAPR’s implementation has been affected by a number of court actions. On December 30, 2011, CSAPR was stayed prior to implementation. On April 29, 2014, the U.S. Supreme Court issued an opinion reversing an August 21, 2012 D.C. Circuit decision that had vacated CSAPR. Following the remand of the case to the D.C. Circuit, USEPA requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted USEPA’s request. Accordingly, CSAPR Phase 1 implementation begins in 2015, with Phase 2 beginning in 2017.
for the two affected EGUs (combined) are 3,116 tons per year for the period of 2015 through 2020 and 1,314 tons per ozone season for the same period\textsuperscript{11}.

The CSAPR requirements are discussed in detail in Condition 6.3 of the planned permit. The language in planned the permit was based on regulatory requirements.

The source submitted an initial compliance certification for CSAPR to USEPA on April 14, 2015. These have been followed by periodic compliance reports on a quarterly basis.

**Section 6.4 Best Available Retrofit Technology**

Under the Clean Air Act, to reduce emissions of visibility impairing air pollutants, NO\textsubscript{x}, SO\textsubscript{2}, and particulate, certain stationary sources must be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an “emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility” (40 CFR 51.301).

A permittee may opt to install, operate, and maintain BART technology on a subject to BART unit, or implement an alternate measure rather than BART if it demonstrates that the alternate measure will achieve greater reasonable progress.

The Permittee chose to comply with the BART requirements through the implementation of an emissions control program (Program) which was authorized by Construction Permit 09050022. Under the Program, the Permittee has reduced emissions of nitrogen oxides (NO\textsubscript{x}) from the two affected units by operating the existing SCR systems on the units on a year-round basis. The Permittee has also reduced emissions of sulfur dioxide (SO\textsubscript{2}) from the affected units by installing flue gas desulfurization technology on the units. The affected units are subject to stringent annual limits for their NO\textsubscript{x} and SO\textsubscript{2} emission rates, which limits represent application of Best Available Retrofit Technology (BART) to the units.

**Section 6.5 Illinois Mercury Rule**

To address mercury emissions from electrical generating units (EGUs), Illinois adopted 35 IAC Part 225 “Control of Emissions from Large Combustion Sources.” This rule provided two options; one option imposes stringent limits on mercury emissions alone; the other option mandates implementation of specific mercury control technology in conjunction with lower emission limits for SO\textsubscript{2} and NO\textsubscript{x}.

The Permittee chose the option of stringent limits on mercury emissions.

The Permittee must comply with the following limits as addressed in planned Section 6.4 of the CAAPP permit:

\textsuperscript{11} Allocations are from Technical Information and Support Document on USEPA website titled “Unit Level Allocations Under the CSAPR FIPs After Tolling” (http://www3.epa.gov/crossstaterule/pdfs/UnitLevelAllocations_Tolled.xls)
• Mercury: 0.0080 lb mercury/GWh gross electrical output, using continuous monitoring equipment which includes mercury continuous emission monitoring systems and associated monitoring and data acquisition systems.

The Permittee submitted an initial compliance certification for the mercury rule to Illinois EPA in 2009. These have been followed by periodic compliance certifications on a quarterly and annual basis.

Section 6.6 Mercury and Air Toxics Standards (MATS Rule)

On December 16, 2011, the USEPA adopted the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR 63 Subpart UUUU, to reduce emissions of hazardous air pollutants from power plants. Specifically, these NESHAP rules, more commonly referred to as the mercury and air toxics standards (MATS) for power plants, address HAP emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs). The final rule was effective on April 16, 2012 and allowed existing sources three years to comply with the rule, resulting in an initial compliance date of April 16, 2015.

MATS addresses emissions of heavy metals, including mercury (Hg), arsenic (As), chromium (Cr), and nickel (Ni); and acid gases, including hydrochloric acid (HCl) and hydrofluoric acid (HF). MATS applies to EGUs larger than 25 MW that burn coal or oil for the purpose of generating electricity for sale and distribution through the national electric grid to the public. For existing coal-fired EGUs, the rule establishes numerical emission limits for mercury, non-mercury HAP metals, and HCl (a surrogate for all toxic acid gases).

The rule establishes alternative numeric emission standards, including SO₂ (as an alternate to HCl), individual non-mercury HAP metals (as an alternate to PM), and total non-mercury HAP metals (as an alternate to PM). The standards set work practices, instead of numerical limits, to limit emissions of organic air toxics, including dioxin/furan, from existing and new coal- and oil-fired power plants. Because dioxins andfurans form as a result of inefficient combustion, the work practice standards require a triennial performance test program for each unit that includes inspection, adjustment, and/or maintenance and repairs to ensure optimal combustion.

The Permittee has chosen the following approaches to comply with requirements of the MATS Rule:

• Non-Mercury HAP Metals: Compliance with the PM limit of 0.030 lb/mmBtu. The source is demonstrating compliance with quarterly emissions testing. (The source has not chosen to use a continuous particulate matter monitoring system.) Pursuant to the MATS Rule, the source may qualify for low emitting EGU (LEE) status for filterable PM if performance test emissions results are less than 50 percent of the applicable emissions limits for all required testing for 3 consecutive years. If LEE status is achieved, the source will be required to conduct performance testing once every three years.
• Acid Gases: Compliance with an SO$_2$ limit of 0.20 lb/mmBtu, as a 30-boiler operating day rolling average. Pursuant to the MATS Rule, the Permittee is allowed this method since the affected EGUs are equipped with a flue gas desulfurization system and an SO$_2$ continuous emission monitoring system (CEMS). With this option, quarterly testing for HCl emissions is not required.

• Mercury: Compliance with a limit of 0.013 lb/GWh, as a 30-boiler operating day rolling average. Pursuant to the MATS Rule, the Permittee is using a CEMS to demonstrate compliance with the standard.

• Work Practices: Conducting tune-ups of the boiler burner and combustion controls at least every 36 calendar months. The Permittee is complying with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in Items 3 and 4 of Table 3 of 40 CFR Part 63 Subpart UUUUU during startup periods and shutdown periods of the affected EGUs. For this purpose, the Permittee has elected to use the first definition of startup in 40 CFR 63.10042.\textsuperscript{12}

**MATS Initial Compliance Demonstrations**

As required by the MATS Rule, the Permittee has conducted all required initial performance testing, boiler tune-ups and notifications. All emissions testing demonstrated significant margins of compliance with the applicable emissions limits. The Permittee submitted a notice of completion of initial performance tune-up for the boilers to the Illinois EPA on July 23, 2015, for the June 16, 2015 Unit 1 tune-up, and on September 2, 2015, for the July 23, 2015 Unit 2 tune-up, and an initial notification of compliance status for the MATS Rule to the Illinois EPA on September 11, 2015. These have been followed by periodic testing reports on a quarterly basis. The first semi-annual compliance report was submitted on January 29, 2016.

**MATS Compliance Options**

The planned permit would also allow the Permittee to switch to other compliance options, as provided by the MATS Rule. This would be addressed in planned Condition 6.5.9, which provides that such switches may occur following prior notification to Illinois EPA and applicable performance testing and revisions to the Notification of Compliance Status as necessary.

**Section 6.7: Consent Decree**

Kincaid is subject to certain requirements and limitations that were established in a Consent Decree in Civil Action Number 13-3086 in the United States District Court of the Central District of Illinois (the “Consent Decree”). The Consent Decree was originally entered by the court in an order signed on July 17, 2013. The case was originally captioned United States of

\textsuperscript{12} This definition provides that a startup is “Either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup.”
America, Plaintiff, v. Dominion Energy, Inc., Dominion Energy Brayton Point, LLC and Kincaid Generation, LLC, Defendants. The caption for this case was subsequently changed to United States of America v. Dominion Energy, Inc., Brayton Point Energy, LLC, Kincaid Generation, LLC, and Equipower Resources Corp., and the Consent Decree was amended pursuant to a Stipulation to Non-Material Modification to Consent Decree, executed December 5, 2013.

The Consent Decree required, among other things, that the Permittee apply for a construction permit to address certain requirements of the Consent Decree. The Permittee applied for and the Illinois EPA issued Construction Permit 14060006 to address those requirements. Certain conditions of the Construction Permit, 14060006, would be incorporated by reference through Condition 6.7 of the planned CAAPP permit. For informational purposes, copies of the construction permit and Consent Decree would be included as Attachment 6 of the CAAPP permit.

Related Compliance Assurance Monitoring (CAM) requirements for the Particulate Matter limit for the coal-fired boilers established in the Consent Decree would be addressed in Condition 7.1.13-2 and Table 7.1.13b in the planned CAAPP permit.

**Section 7.1: Coal Fired Boilers**

**Conditions 7.1.1**

The description of the boilers would be updated to reflect currently installed pollution control equipment. Equipment installed on the boilers since 2005 includes activated carbon injection (ACI) and dry sorbent injection (DSI) systems.

**Condition 7.1.2**

New emissions control equipment added to the coal boilers since 2005 would be added to the table, which include the ACI and dry sorbent injection (DSI) systems.

**Condition 7.1.4(h) through (l)**

These new conditions for the coal boilers would refer to applicable requirements of CSAPR in Section 6.3 of the planned permit, the BART requirements in Section 6.4 of the planned permit, the applicable requirements of the Illinois Mercury Rule in Section 6.5 of the planned permit, the applicable requirements of the MATS Rule in Section 6.6 of the planned permit and the Consent Decree in Section 6.7 of the planned permit. Discussions of these requirements are provided above in the discussions for “Changes to Section 6.0”.

**Condition 7.1.5(f) through (h)**

Non-applicability statements for NSPSs 40 CFR Part 60 Subparts Da and CCCC would be added to the permit. This is because these boilers are existing units and have not been modified or reconstructed after relevant trigger dates (NSPS Subpart Da) and do not combust any waste (NSPS Subpart CCCC). Non-applicability statements would be also added for NESHAPs 40 CFR Part 63
Subparts DDDDD and JJJJJJ. This is because the boilers are utility boilers subject to MATS.

Condition 7.1.5(d), (e) and (i)

Non-applicability statements for Compliance Assurance Monitoring (CAM) for State Rule requirements would be updated with cross-references, and CAM for mercury State Rule requirements based on use of continuous monitoring devices would be added to the permit. The planned permit would also state that CAM is also not applicable for MATS standards.

Condition 7.1.6(b)

A statement that the tune-ups required by the MATS Rule, as would be addressed in Condition 6.5.4(a), satisfy the semi-annual requirement for a combustion evaluation would be added to the condition.

Condition 7.1.9(b)(v)

Construction permit T1 recordkeeping requirements for the ACI systems would be added.

Condition 7.1.9(i)

Recordkeeping requirements for continuous monitoring systems, pursuant to 40 CFR Part 75, as required for the Acid Rain Program and CSAPR would be added.

Section 7.4: Fly Ash Handling Equipment

Condition 7.4.1

The description of the fly ash handling equipment would be updated to reflect the changes in operation of two fly ash secondary collection systems as described in a construction permit.

Section 7.5: Auxiliary Boiler

Condition 7.5.3(b)

An applicability statement for the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD would be added.

Condition 7.5.5(c)

A non-applicability statement that the boilers are not subject to emission limits or operating limits in the NESHAP would be added.

Condition 7.5.6(a)

The condition would be revised to state that a combustion evaluation of the affected boiler is not required in a calendar year in which a boiler tune-up in conformance with the NESHAP is performed. The NESHAP tune-up requires, among
other things, burner inspections, optimization of CO emissions, and inspections of control systems.

**Condition 7.5.6(b) and (d)**

Work practice requirements from 40 CFR 63 Subpart DDDDD would be added.

**Condition 7.5.9(d)**

Recordkeeping requirements for the annual tune-up required by 40 CFR 63 Subpart DDDDD would be added.

**Condition 7.5.10(b)**

Reporting requirements for the annual tune-up required by 40 CFR 63 Subpart DDDDD would be added.

**Section 7.6: Gasoline Storage Tank**

**Condition 7.6.5(d) and (e)**

A non-applicability statement concerning CAM would be updated. CAM applicability determinations, which could not be addressed in a prior permitting action, would now be addressed. Also CAM non-applicability for a NESHAP would be added.

**Section 7.7: Dry Sorbent Injection System**

**Condition 7.7.1**

The description of the Dry Sorbent Injection (DSI) System would be added.

**Condition 7.7.2**

A table containing a description of the emission unit and associated emission control equipment would be added.

**Condition 7.7.3**

Applicability statements concerning the affected process and applicability to the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart OOO, would be added.

**Condition 7.7.4**

Applicable emission standards for opacity of emissions, and fugitive emissions would be added.

**Condition 7.7.5**

A statement that the processes are not subject to CAM would be added.

**Condition 7.7.6**
Work practices, such as control measures for particulate matter, and emission and operational limitations from the construction permit would be added.

**Condition 7.7.7**

Requirements for opacity observations of the affected processes would be added.

**Condition 7.7.8**

Requirements for inspections for visible emissions of the affected processes would be added.

**Condition 7.7.9**

Recordkeeping requirements such as control measures, construction permit requirements, inspections, and repair and maintenance of the systems would be added.

**Condition 7.7.10**

Reporting requirements for deviations and construction permit reporting requirements would be added.

**Condition 7.7.11**

Operational flexibility concerning control measures would be added.

**Condition 7.7.12**

Compliance procedures for emission limitations would be added.
CHAPTER 4 - COMPLIANCE ASSURANCE MONITORING (CAM)

4.1 CAM Monitoring Approach

The source is subject to Compliance Assurance Monitoring (CAM) requirements for Particulate Matter (PM) for the state standard of 0.1 lb/mmBtu (35 IAC 212.202) and 0.030 lb/mmBtu pursuant to Paragraph 92 of the Consent Decree.

The Permitee selected opacity as the primary indicator for the CAM Plans for the PM emissions of the coal-fired boilers. Under the conditional approval of the submitted CAM plans, the Permitee was required to conduct testing for PM emissions to derive a relationship between the opacity and PM emissions of each boiler. This relationship was then used to determine an opacity indicator range for each applicable PM limit, such that as long as the opacity is at or below these values during normal boiler operation, there is a reasonable assurance that the boiler will also comply with the respective applicable PM emission limits. This relationship was used to determine appropriate opacity indicator ranges for both the state standard of 0.1 lb/mmBtu and the Consent Decree standard of 0.030 lb/mmBtu.

The continuous opacity monitoring system (COMS), which is installed in the common stack for the boilers, is used to continuously monitor opacity. The selected indicator range that defines an excursion is 30 percent opacity for the state standard, based on a three-hour block average, and 11 percent opacity for the Consent Decree standard, based on a six-hour block average, with both indicator ranges excluding periods of startup and shutdown, and malfunction events. For the state limit, at 30 percent opacity, the analysis of test results indicates that the compliance margin of the boilers would be approximately 25 percent compared to the applicable emission limit of 0.1 lb/mmBtu for both boilers. For the Consent Decree limit, at 11 percent opacity, the analysis of test results indicates that the compliance margin of the boilers would be approximately 10 percent compared to the emission limit of 0.030 lb/mmBtu for both boilers.

4.2 CAM PM Testing

PM testing was conducted to derive the relationship between opacity and PM emissions for the boilers. The PM testing was conducted under three distinct operating conditions addressing the operation of the ESPs for the boilers: Baseline, Detune Mid and Detune High.

The test program simulated boiler and control device operation under typical operating conditions and under conditions that represented reduced effectiveness of control device. During testing, the boilers operated in the maximum load range, which represents the condition associated with the highest PM emissions rates. Each test consisted of at least three runs using USEPA Test Method 5.

The table below provides a summary of the test results for the boilers. For all operating conditions tested, the PM emissions were less than 62.4 percent of the applicable state PM emission limitation (0.1 lb/mmBtu).
<table>
<thead>
<tr>
<th>Operating Condition</th>
<th>PM Emissions (lb/mmBtu)</th>
<th>Opacity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>0.0036</td>
<td>1.19</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.0060</td>
<td>1.14</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.0058</td>
<td>1.16</td>
</tr>
<tr>
<td>De-tune Mid</td>
<td>0.0373</td>
<td>13.58</td>
</tr>
<tr>
<td>De-tune Mid</td>
<td>0.0388</td>
<td>14.97</td>
</tr>
<tr>
<td>De-tune Mid</td>
<td>0.0316</td>
<td>14.57</td>
</tr>
<tr>
<td>De-tune High</td>
<td>0.0624</td>
<td>30.36</td>
</tr>
<tr>
<td>De-tune High</td>
<td>0.0578</td>
<td>18.84</td>
</tr>
<tr>
<td>De-tune High</td>
<td>0.0607</td>
<td>20.25</td>
</tr>
</tbody>
</table>

The analysis of the results of this testing demonstrates that the selected indicator ranges in the CAM Plans for the boilers meets the design requirements of 40 CFR 64.3.

4.3 CAM Averaging Period

The CAM Rule does not provide specific averaging periods to be used in the development of monitoring approaches. However, 40 CFR 64.3(d)(3)(i) implies that the appropriate averaging period is the averaging period of the underlying emissions standard. In this case, 35 IAC 212.110 provides that compliance with the applicable PM standard is based on emissions testing. Since emissions testing for PM includes at least three test runs, each nominally one-hour in duration, this indicates that a three-hour averaging period is an appropriate averaging time for purposes of CAM for the state rule. Since emissions testing for PM for the Consent Decree includes at least three test runs, each nominally two-hours in duration, this indicates that a six-hour averaging period is an appropriate averaging time for purposes of CAM.

4.4 CAM Excursion

During “normal operation”, (i.e., periods other than startup, shutdown or malfunction), an excursion is a three-hour or six-hour, as applicable, block average opacity in excess of 30 percent or 11 percent, as applicable, in the common stack for the boilers. Each excursion must be investigated by the source to determine the monitoring status and operating conditions responsible for the excursion.

4.5 CAM Excursion Corrective Action

Upon detecting an excursion, Kincaid personnel must implement corrective action to restore the indicator to below the indicator range. Corrective action should begin with an evaluation of the monitoring system to determine if the excursion is related to the monitoring system or the control device. Individual unit process and control device operating parameters will be reviewed to determine the cause of the excursion. To the extent possible, any corrective action should reduce the potential of similar excursions from recurring.

4.6 CAM Reporting Requirements
All excursions must be reported in the plant’s semi-annual CAAPP compliance report. As required by the CAM Rule, the Permittee shall include summary information on the number, duration and cause of excursions and the corrective actions taken. It is not necessary to report PM control equipment malfunctions that do not cause an excursion. The Permittee will also include summary information on the number, duration, and cause of opacity monitor downtime incidents.

4.7 CAM Recordkeeping Requirements

The Permittee must retain all monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application.

4.8 Planned Changes to the CAAPP Permit

As part of the approval of the CAM Plan, the following changes would be made to the CAAPP permit, as shown in the planned permit:

Condition 7.1.8(e)

Reference to the obsolete CAM Condition 7.1.13-1 in the applicability statement concerning CAM for PM would be removed. Also, the condition would be revised to specifically state that the boilers are subject to CAM requirements for the PM standards set forth or referenced in Conditions 6.7.2(a) and 7.1.4(b).

Condition 7.1.9(c)(ii)

Condition 7.1.9(c)(ii)(B) was added in a previous permitting action for additional periodic monitoring to demonstrate compliance with the applicable state standard for PM (i.e., 0.1 lb/mmBtu pursuant to 35 IAC 212.202, as addressed in Condition 7.1.4(b)) until the conditionally approved CAM Plan received final approval and implementation. Since this has been achieved, the condition would be removed from the permit.

For this same reason, the reference to Condition 7.1.4(b) in the introductory clause of Condition 7.1.9(c)(ii) would also be removed. The CAM Plans would now address compliance with the PM limits in the revised permit. In addition, the reference to Condition 7.1.4(a) would be changed to Condition 5.2.2(b) for consistency with other references in the permit to plant-wide opacity limits.

Condition 7.1.13-1

This condition provides conditional approval of the CAM Plans, including the deadline for testing of PM emissions for purposes of CAM and a requirement for implementation of Compliance Assurance Monitoring. The Permittee has complied with all requirements of this conditional approval; therefore, the requirements in Condition 7.1.13-1 would be removed from the CAAPP permit and the condition left intentionally blank.

Condition 7.1.13-2(a)

Reference to an obsolete compliance date for the CAM requirements in Condition 7.1.13-1 would be removed.
Condition 7.1.13-2(b)
The recordkeeping requirement of this condition prior to implementation of CAM would be removed and the condition left intentionally blank.

Condition 7.1.13-2(c)
The statement concerning an obsolete compliance date which has already occurred would be removed.

Condition 7.1.13-2(d)
A reference to obsolete Condition 7.1.13-1 would be removed.

Table 7.1.13a
The value for the indicator range would be added to Table 7.1.13a. The table would also be updated to reflect clarifying changes to the CAM Plan made by the Permittee, and remove the note concerning indicator values to be added pursuant to obsolete Condition 7.1.13-1(a).

Table 7.1.13b
Table 7.1.13b would be added to set forth the CAM Plan for the PM limit from the Consent Decree.
Chapter 5 - OTHER PLANNED REVISIONS TO THE CAAPP PERMIT THROUGH SIGNIFICANT MODIFICATION

Introduction

The revisions described below are planned to be made in response to the Permittee’s application requesting certain revisions to the provisions of the CAAPP permit, including certain revisions to the requirements for Periodic Monitoring in the current CAAPP permit. These revisions that involve elements of Periodic Monitoring that are not explicitly required by applicable rules but were previously determined to be appropriate to ensure compliance with applicable substantive requirements. The Illinois EPA has determined that certain revisions to be these requirements are appropriate.

Section 5.0: Overall Source Conditions

Condition 5.2.6

This source wide condition would be updated to more clearly identify the requirements imposed by 35 IAC 244 for development and implementation of an Episode Action Plan. This condition would also provide that the Episode Action Plan previously submitted to the Illinois EPA would be incorporated by reference into the CAAPP permit.

Condition 5.2.7

This source wide condition would be added to incorporate by reference the Control Measures Record submitted to the Illinois EPA as required by Condition 7.2.9(b) for coal handling equipment, Condition 7.3.9(b) for coal processing equipment, and Condition 7.4.9(b) for fly ash handling. This condition would also specify that any revisions to the Control Measures Records submitted to the Illinois EPA would be incorporated by reference into the CAAPP permit. The initial record was submitted to the Illinois EPA on February 10, 2015.

Condition 7.1.5(a)

The affected boilers are only able to burn natural gas as auxiliary fuel, not liquid fuel. Therefore, references to 35 IAC 212.206, 214.161(a) and (b), and 214.162, which reference standards for liquid fuel, would be removed.

Condition 7.1.7(a)(ii)

This condition requires that the source conduct testing for the coal-fired boilers for PM emissions if a boiler operates at a load that is significantly higher than the load at which testing was most recently conducted for the boiler for a significant amount of time. The condition was revised to more appropriately address the circumstances of the coal-fired boilers at Kincaid. For this purpose, the criterion for load on the boiler is now when the greatest load for 72 hours in a calendar quarter is 15 percent or greater of the load at

13 Pursuant to Section 39.5(14)(c)(iii) of the Act, proceedings involving significant modifications to a CAAPP permit must use the same procedures that apply to initial permit issuance or renewal.
which testing was last conducted, rather than the optional 2 percent of the load or 5 Megawatts.

These criteria in the initial permit were not appropriately tailored to these particular boilers. The original criteria would potentially require that testing for PM emissions be conducted in circumstances in which it would not be warranted. The changes to these criteria are not expected to enable the regular testing of the boilers for PM emissions to be conducted while operating at loads that are lower than the loads at which such testing would otherwise have been conducted. In any case, Condition 7.1.7(a)(v) generally provides that the source must conduct testing for these boilers for PM emissions upon request by the Illinois EPA for such testing.

Condition 7.1.7(a)(v)(A)

This condition addresses certain emission testing of the coal-fired boilers that may be required as a result burning material other than standard fuel in the coal-fired boilers. As present in the current permit, this condition generally requires that testing must be conducted for the coal-fired boilers for PM and CO emissions if in a calendar quarter standard fuel (i.e., coal, fuel oil and natural gas) make up less than 97 percent, by weight, of the material burned in a boiler. The revised permit would change this to require such testing be conducted if the alternative fuel burned during the quarter is greater than 3 percent by weight.

Condition 7.1.7(b)(i)

This condition requires that measurements of CO and PM emissions be performed at the maximum operating loads of the affected boilers and other operating conditions that are representative of normal operation. This condition would be revised to allow this testing to be performed at 90 percent or greater of the seasonal maximum operating loads of the affected boilers. This provision would now reflect current site configuration and is consistent with testing at maximum loads done during routine RATA testing.

Condition 7.1.9(b)(iv)(B)

The note that records for SCR are only required when it is operating would be removed, because the SCRs now must be operated on a year-round basis to meet the BART standard (Condition 6.4).

Conditions 7.1.9(d)(iii) and (e)(iii)

Records for information required by 40 CFR Part 75 would be added.

Condition 7.1.9(e)(ii)

Records to verify compliance with the limitations of Condition 7.1.4(f) would be added.

Condition 7.1.10-2(a)(i)(B)

Revisions to this condition would be made so that the information that must be periodically reported related to the load at which the boilers have operated
would be consistent with the new criterion for retesting that would be set in Condition 7.1.7(a)(ii), i.e., operation at 15% higher than the greatest load on the boiler during the most recent set of PM tests for more than 72 hours.

**Condition 7.1.10-2(b)(iii)(D)**

Clarification to reporting of excess SO\textsubscript{2} emissions would be made to include whether such excess emissions occurred during startup, malfunction or breakdown of the boiler, if known.

**Condition 7.1.10-2(d)(iii) through (v)**

These conditions deal with information that must be included in quarterly reports related to opacity exceedances. These conditions would be revised to more clearly specify information that the Permittee must include in quarterly reports regarding all opacity exceedances during the quarter as well as further information that must be included in these reports regarding opacity exceedances or groups of opacity exceedances that resulted from the same or similar causes. The revised conditions better reflect the required contents of these reports, as specified by Section 39.5(7)(f)(ii) of the Act.

Specifically, Condition 7.1.10-2(d)(iii) would now clearly identify the items that the Permittee must include in a summary of information for each period of excess opacity during the quarter. The requirement to include a detailed explanation of the cause and corrective actions for each period of excess opacity would be removed from this condition because this information would be addressed in Condition 7.1.10-2(d)(v). This condition continues to require the Permittee to identify the cause for each period of excess opacity, if known, and any corrective actions taken.

Condition 7.1.10-2(d)(v) would now require the Permittee to provide further information for opacity exceedances or groups of opacity exceedances with “recurring” causes or “new” causes during the quarter. The conditions would define “recurring” causes as those that also resulted in exceedances during the previous quarter and “new” causes as those that did not result in opacity exceedances during the previous quarter.

For “recurring” cause opacity exceedances or groups of opacity exceedances each quarterly report shall include: an explanation of any particular circumstances or factors during the quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the quarter to reduce the number or magnitude of exceedance(s).

For “new” cause opacity exceedances or groups of opacity exceedances each quarterly report shall include: an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedance(s).
Condition 7.1.12(a)(ii)

This condition addresses 35 IAC 212.123(b), which provides that opacity may be greater than 30 percent, 6-minute average, if opacity was not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such emissions only come from one source within a 1000 foot radius, limited to three times in any 24 hour period.

As discrete measurements of opacity may be used to comply with this standard, Condition 7.1.12(a)(ii)(A) would be revised to allow discrete measurements to be made at up to 15 seconds intervals, instead of the current 10 seconds interval. With this revision, the permit would still provide for the reasonable implementation of 35 IAC 212.123(b) by the Permittee. This revision will also potentially reduce the amount of data that must be considered when the Permittee elects to show compliance by means of this alternative to 35 IAC 212.123(a). It will also accommodate existing software for continuous opacity monitors systems that records measured data at an interval greater than 10 seconds.

Sections 7.2: Coal Handling Equipment

Condition 7.2.3(b)

The condition would updated to include emission units subject to the “process weight rate” rule, 35 IAC 212.321(a).

Condition 7.2.4(c) and 7.2.5(a)

Condition 7.2.4(c) would be added because the coal transfer conveyors, surge bin with bin vents, and coal storage silos are subject to the “process weight rate rule”, 35 IAC 212.321.

As a result, Condition 7.2.5(a) would be revised to specifically identify the operations that are not subject to 35 IAC 212.321.

Sections 7.3: Coal Processing Equipment

Condition 7.3.4(c)

This condition would be updated to clarify that each unit subject to the “process weight rate rule” shall demonstrate compliance individually.

Sections 7.4: Fly Ash Handling Equipment

Condition 7.4.4(c)

This condition would be updated to clarify that each unit subject to the “process weight rate rule” shall demonstrate compliance individually.

Sections 7.6: Gasoline Storage Tank

Condition 7.6.8

The condition would be revised to allow the Permittee to conduct the annual inspection of the storage tank not later than May 1st of each calendar year.
instead of the time period of March 1 through April 30\textsuperscript{th}. This would allow the Permittee more flexibility in scheduling the inspection, while still performing the inspection prior to the annual ozone season.
CHAPTER 6 – PLANNED ISSUANCE OF A REVISED ACID RAIN PROGRAM PERMIT

The Illinois EPA is proposing to issue a revised Acid Rain Program Permit for Kincaid pursuant to and consistent with Section 39.5(17)(f) of the Illinois Environmental Protection Act and Titles IV and V of the federal Clean Air Act. This permit would address the two coal-fired electrical generating units at this source, which are referred to as Kincaid Unit 1 and Kincaid Unit 2 for purposes of the Acid Rain Program.

The revised acid rain permit would reflect applicable regulatory requirements of the federal Acid Rain Program. As such, it would require the source to hold SO$_2$ allowances under the federal Acid Rain Program to account for SO$_2$ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO$_2$ during or after a specified calendar year. As the affected units are existing units under the Acid Rain Program, the source receives annual allocations of allowances from USEPA for the units, as would be identified in the permit. The source may also participate in allowance trading with other sources to obtain additional allowances or transfer surplus allowances.

The revised acid rain permit would also address the applicable limit under the Acid Rain Program that applies to NO$_x$ emissions of the affected units, 0.45 lb/mmBtu, annual average. In this regard, the permit would no longer provide for compliance with the NO$_x$ limits of the Acid Rain Program to be shown by averaging of the NO$_x$ emissions of the affected units with the NO$_x$ emissions of other units operated by the Permittee that are subject to the Acid Rain Program.

The revised acid rain permit would also address emission monitoring and reporting requirements under the Acid Rain Program. The permit would not affect the source’s responsibility to meet all applicable local, state, and federal requirements.

The Illinois EPA is proposing that the revised acid rain permit would expire on February 5, 2020, when the current CAAPP permit for Kincaid will expire. This will coordinate the term of the revised permit with the remaining term of the CAAPP permit for Kincaid, as is provided for by 40 CFR 72.73(b)(2). This will enable the renewal of the current CAAPP permit for the Kincaid and the next renewal of the acid rain permit to be processed at the same time.
CHAPTER 7 - SUPPLEMENTAL INFORMATION

This chapter provides supplemental information about the emission units at Kincaid to assist interested individuals in understanding the changes to the CAAPP permit that are now planned. General discussions about reporting requirements, start-up and malfunction/breakdown, incorporation by reference, and periodic monitoring in CAAPP permits are included in Sections 7.8 through 7.11 below.

7.1-1 Coal-Fired Boilers

This source has two coal-fired boilers whose steam output is used for generation of electricity.

CO emissions from the boilers are addressed by good combustion and work practices. NO\textsubscript{x} emissions from the boilers are controlled by combustion control measures including over fire air systems (OFA) and selective catalytic reduction systems (SCR). Emissions of PM and non-mercury hazardous air pollutant (HAP) metals are controlled by electrostatic precipitators (ESP). SO\textsubscript{2} emissions are controlled with Dry Sorbent Injection (DSI) flue gas desulfurization systems, which also control emissions of hydrogen chloride (HCl). Mercury emissions are controlled with the combination of the electrostatic precipitator (ESP) on each affected boiler, and the use of the Activated Carbon Injection (ACI) systems.

The boilers are subject to emission standards for CO, NO\textsubscript{x}, PM (including non-mercury HAP metals), SO\textsubscript{2}, HCl and mercury and a standard for the opacity of emissions. The boilers are also subject to the federal Acid Rain Program, which imposes requirements on SO\textsubscript{2} and NO\textsubscript{x} emissions and requires that the boilers be equipped with continuous emissions monitoring systems (CEMS) for SO\textsubscript{2} and NO\textsubscript{x} with computerized systems for collection of emission data. The boilers are also subject to the federal Cross-State Air Pollution Rule (CSAPR), also known as the Transport Rule. CSAPR requires the source to hold allowances for its actual annual SO\textsubscript{2} emissions and annual and Ozone Season NO\textsubscript{x} emissions.

For the PM standards for the MATS Rule, the source has elected to perform quarterly emissions testing to demonstrate compliance. Recent performance testing of the boilers for PM showed compliance with the applicable limit (0.03 lb/mmBtu) with a significant margin of compliance (86%). The MATS rule uses modified USEPA Test Method 5, with a sampling temperature of 320 ± 25°F.

Periodic testing for PM is also required to verify compliance with the state emission standard for PM.\textsuperscript{14} CO testing is also required for the boilers and shall be performed in conjunction with this PM testing unless a CO test was completed during a prior relative accuracy test audit (RATA) for the continuous emissions monitoring systems. Required testing is to be conducted in the maximum operating load range and during other operating conditions that are consistent with normal operation of the boilers.

\textsuperscript{14} Slightly different methods are required for this testing. Testing for the state emission standards uses USEPA Method 5, with a probe temperature of 248 ± 25°F.
The boilers are subject to state and federal rules for mercury emissions which require continuous monitoring systems. The source has elected to use mercury CEMS to demonstrate compliance. The source’s most recent quarterly reports submitted for the state requirements show a significant margin of compliance for the state limits and hence an even greater margin for the federal requirements since the state limit is significantly lower than the federal limit (0.0080 lb/GWh versus 0.0130 lb/GWh).

The boilers are operated pursuant to formal operating procedures. The CAAPP permit and MATS rule require that the boilers must be started up in accordance with procedures that are developed and maintained to minimize emissions. In addition, they must operate all continuous monitoring systems during startup and use “clean fuels” for ignition.

The boilers have the potential to exceed the applicable state emission standards for PM, CO and opacity during malfunction and breakdown. As provided by applicable state rules, subject to certain terms and conditions, the permit authorizes the source to make certain claims related to continued operation with emissions in excess of applicable state emission standards during such events. In particular, such continued operation must be necessary to provide essential service or to prevent injury to personnel or severe damage to equipment. In addition, upon occurrence of excess emissions, the source must, as soon as practicable, reduce boiler load, repair the affected boiler, remove the affected boiler from service, or undertake other action so that exceedances of state emission standards cease.

The Permittee must keep a variety of operational records for each boiler and its control equipment. For startup, records must be kept with the date, description, and duration of each startup. Further records are required if a startup does not progress in a routine manner to normal operation and compliance with applicable standards or if the source’s startup procedures are not followed.

For malfunction/breakdown events, records must be kept 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 or CO emissions 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 PM and/or CO emissions during the incident. Maintenance and repair records must also be kept.

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, must be 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. The Permittee is also required to
submit quarterly reports that address exceedances, along with certain data from the continuous monitoring systems for \( \text{SO}_2 \) and \( \text{NO}_x \).

The Permittee 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 hourly load achieved by each boiler; a discussion of significant changes in the fuel supply; the number, total duration, and description of startups; information for \( \text{SO}_2 \), \( \text{NO}_x \), PM 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 the applicable \( \text{SO}_2 \) limitation: the starting date and time of the excess emissions; the duration of the excess emissions; the measured emissions rate, if any; and a detailed explanation of the cause of the excess emissions, if known, with a discussion of any corrective actions taken.

For opacity and PM exceedances, the quarterly reports must also contain information for each period when opacity is in excess of applicable standards. The reports must include the starting date and time of the excess opacity, duration of the excess opacity, magnitude of the excess opacity based on six-minute average, the cause of the excess opacity, if known, a detailed explanation of corrective actions taken, identification of any previous report identifying excess opacity, and information regarding incidents when operation continued during malfunction or breakdown with excess opacity.

### 7.1-2 Coal-Fired Boilers - Consent Decree

The coal-fired boilers are also subject to the Consent Decree as described above. The Consent Decree specifies, among other things, that the Permittee must operate pollution control devices for reducing \( \text{NO}_x \), \( \text{SO}_2 \) and PM emissions at all times the units are operating, in addition to stringent emissions standards, and the requirement to install a PM-CEMS. Specific requirements of the Consent Decree are detailed in Section 6.7 of the planned permit.

### 7.2 Coal Handling Equipment

The source handles, transfers, and stores coal in a series of operations. The PM emissions from coal handling are subject to an opacity limit and various rules that address stack and fugitive PM emissions.

The CAAPP permit generally requires implementation of emission control measures for coal handling. Coal processing equipment and fly ash handling equipment are currently subject to similar requirements. Similar requirements are planned for limestone and gypsum handling operations. Kincaid must specify the control measures that it will implement in a plan or "Control Measures Record". The permit also requires submittal of the Control Measures Record and any changes to this record to the Illinois EPA.\(^{15}\)

\(^{15}\) As required by the current CAAPP permit Kincaid submitted the Control Measures Record for coal and fly ash materials handling operations at Kincaid to the Illinois EPA on February 10, 2015.
In general, monthly inspections of control measures are to be performed while the equipment is in use. These inspections are to confirm implementation of the work practices to control dust (PM emissions). Visible emissions observations are to be performed on an annual basis to confirm compliance with the opacity limit. Opacity observations are required every three years.

Records must 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 must also be kept.

Reporting of deviations from the control measures required by the record that last more than 12 hours must 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.

Based on the results of the opacity observations, the control measures that the source is implementing for the material handling and processing equipment at Kincaid provide a significant margin of compliance with the applicable opacity limits and ensure compliance with substantive requirements in the permit. A report for opacity observations for the Coal Handling Equipment, Coal Processing Equipment and Fly Ash Handling Equipment, as required by the current CAAPP permit, was submitted to the Illinois EPA on November 6, 2015. A total of 66 observations were completed. All observations conducted demonstrated a significant margin of compliance with the applicable opacity limits in 35 IAC 212.123 and 40 CFR Part 60 Subpart Y. Based on observed opacity, the control measures identified in the Control Measures Plan are sufficient to reasonably ensure continuous compliance.

### 7.3 Coal Processing Equipment

The Permittee prepares or processes coal for use as fuel in its boilers with crushers that reduce the size of the coal. The PM emission from coal

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16 The opacity observations were conducted by Hastings Engineering in the third quarter of 2015.

17 35 IAC 212.123 requires that opacity of emissions from all of these units not exceed 30 percent. Opacity of emissions from certain units that are also subject to 40 CFR Part 60 Subpart Y must be less than 20 percent.

A total of 62 opacity observations were completed for units subject to only 35 IAC 212.123. Only four observations were greater than zero percent; the highest was 4.58 percent. All units were in compliance.

Four opacity observations were completed for units that are also subject to 40 CFR Part 60 Subpart Y. Observations for opacity were conducted for a building enclosing multiple emission points. Because opacity would be associated with fugitive emissions that could be from any equipment inside, the lowest applicable opacity limit (20 percent) was used to assess compliance. The opacity observed for each observation point for the building was zero and all units were in compliance.

All coal handling and processing operations opacity observations were zero. The only standard that applies to these operations is 30 percent opacity, per 35 IAC 212.123. The measures being used are fully sufficient to comply with this standard.

A total of 20 opacity observations were made for the fly ash handling operations. The loadout of dry fly ash showed distinct opacity, i.e., up to 4.58 percent opacity. These values for opacity were the result of certain individual readings of opacity at 10 percent, as well as 5 percent, combined with other readings of zero percent opacity. Again, this showed compliance with the applicable opacity standard, 35 IAC 212.123.
processing is subject to an opacity limit and various regulations that address fugitive PM emissions.

Monthly inspections of control measures are to be performed while the equipment is in use. These inspections are to confirm implementation of the work practices to control dust (PM emissions). Visible emissions observations are to be performed on an annual basis to confirm compliance with the opacity limit. Opacity observations are required every three years. Additionally, baghouses would be inspected annually.

Records must 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 must also be kept.

Reporting of deviations from the control measures required by the record that last more than 12 hours must 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.

Based on observed opacity from the coal processing equipment, the control measures for this equipment identified in the Control Measures Plan are sufficient to reasonably ensure continuous compliance.

7.4 Fly Ash Handling Equipment

The Permittee operates ash removal systems that handle ash collected at the coal-fired boilers in a dry state. Regular monthly inspections of control measures are required of the operation while the equipment is in use. In addition, a weekly inspection is required for the fly ash load out operations.

Visible emissions observations are required at least annually except for fly ash load out operations, for which observations are required quarterly. Such observations are only required for ash handling equipment from which visible emissions, i.e., any visible emission, are normally observed. Opacity observations are required every three years.

The Permittee must 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.

Extended deviations from the identified control measures must be reported within 30 days. All deviations must be addressed in quarterly reports that accompany the quarterly reports for the coal-fired boilers.

Based on observed opacity from the fly ash handling equipment, the control measures for this equipment identified in the Control Measures Plan are sufficient to reasonably ensure continuous compliance.

7.5 Auxiliary Boiler
The auxiliary boiler is a fuel combustion emission unit used to produce steam for auxiliary support and provide heat. The boiler was constructed in 1984 and has a nominal capacity of 175 mmBtu/hr heat input. The boiler is not used to directly generate electricity. The boiler is fired with natural gas.

The boiler is subject to an emission standard for CO. It is also subject to standards for the opacity of emissions.

The Permittee is required to conduct a tune-up of the boiler once every five years following the procedures specified in the NESHAP, 40 CFR 63 Subpart DDDDD.

The Permittee is required to promptly report deviations from applicable limits in the permit, and provide quarterly reports for operating records, opacity, startups, and malfunctions and breakdowns resulting in excess emissions.

### 7.6 Gasoline Storage

The Permittee utilizes a small gasoline storage tank for fueling of plant vehicles. The tank must use permanent submerged loading to minimize emissions of volatile organic material from the transfer of gasoline into the tank.

Annual inspections of the tank are required. The Permittee also must keep appropriate records to show compliance with applicable requirements. The Permittee must report significant deviations from the applicable permit requirement, i.e., failure of the submerged loading, within 30 days. The Permittee must report any other deviations with the quarterly reports for the coal-fired boilers.

### 7.7 Dry Sorbent Injection Equipment

The Permittee operates a dry sorbent injection (DSI) system that is used for unloading, storage and transfer of sorbent material, such as Trona (sodium bicarbonate) and ball mills for sorbent preparation. Associated particulate matter (PM) emissions are controlled by various control measures including enclosures and covers.

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

Opacity observations of the DSI equipment are required no later than two years after effectiveness of Condition 7.7.7(a)(i)(A), and every three years thereafter.

The Permittee must keep records of, among other things, the specific control measures that are used, operational data, required inspections, and times when the control measures identified in the Control Measures Record are not utilized.

Extended deviations from the identified control measures must be reported within 30 days. All deviations must be addressed in quarterly reports that accompany the quarterly reports for the coal-fired boilers.

### 7.8 Discussion of Reporting Required by CAAPP Permits
The effectiveness of the CAAPP relies in part upon accurate and timely reporting by sources. The Illinois EPA, USEPA, and the public rely on reports submitted by sources for information about the compliance status of sources and to help guide their investigations and actions. CAAPP permits generally contain four types of reporting requirements to address and facilitate compliance with applicable requirements. CAAPP permits contain “regulatory” reporting requirements that are carried over from applicable state and federal rules. CAAPP permits require prompt reporting of any deviations that occur from the applicable requirements in the permit. CAAPP permits also require reports on the monitoring that is required under the permit. Finally, CAAPP permits require annual compliance reports or “compliance certifications” in which a source must report on its compliance status during the preceding calendar year. These four types of reporting are all present in the CAAPP permit for Kincaid.

7.9 Discussions of Start-up and Malfunction/Breakdown

As related to state emissions standards under Illinois’ State Implementation Plan (SIP), this CAAPP permit addresses excess emissions during startups or periods of malfunction or breakdown in a manner that is consistent with the SIP. 35 IAC 201.149, which is currently part of Illinois’ SIP, 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 an applicable state emission standard or limitation absent express permit authorization.

The provisions governing such permit authorizations are in 35 IAC Part 201 Subpart I, which is also part of Illinois’ SIP. These provisions make clear that the process in Illinois for addressing compliance with state emission standards during malfunction/breakdown and startup is in two steps. The first step, as set forth at 35 IAC 201.261, consists of a source seeking authorization by means of a permit application to make a future claim of malfunction/breakdown or startup. Absent a request for authorization in a permit application, followed by the express grant of such authorization in an issued permit, a source cannot make a claim of malfunction/breakdown or startup under Illinois rules in the event of a future exceedance of a state emission.

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18 USEPA has issued a “SIP Call” that requires Illinois, as well as other states, to remove or appropriately revise provisions that potentially act as an obstacle to enforcement for violations of emission limits in the SIP that occur during startup, shutdown or malfunction.

19 35 IAC 201.149 and 35 IAC Part 201 Subpart I only address violations of state emission standards and limitations, as found in 35 IAC Subtitle B: Air Pollution, Chapter I: Pollution Control Board, Subchapter c: Emission Standards and Limitations for Stationary Sources. “Subchapter c” includes Illinois emissions standards for various pollutants, including particulate emissions (35 IAC Part 212), SO2 emissions (35 IAC Part 214), and NOx emissions (35 IAC Part 217).

20 Pursuant to 35 IAC 201.261, a request related to malfunction/breakdown should 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. A request related to startup should include a description of the startup procedure, duration and frequencies of such startups, type and quantity of emissions during startups, and efforts to minimize such startup emissions, duration of individual startups, and frequency of startups.
These regulatory provisions are specifically recognized by the CAAPP, pursuant to Section 39.5(5)(s) of the Act.

The second step in Illinois’ process related to excess emissions during malfunction/breakdown or startup, as addressed by 35 IAC 201.262, addresses the showing that a source must make for a viable claim of malfunction/breakdown or startup. For malfunction/breakdown, this showing consists of a demonstration that continued operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. For startup, this showing consists 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. In some respects, this showing for startups may be evaluated based on past practice when considering whether a permit should provide authorization to make claims related to startup. However, this showing also continues to be relevant on an ongoing basis, like the showing required for malfunction/breakdown events, which may never actually occur. This is because the showing for startups also relates to future activities whose exact circumstances are not known.

For certain emission units at Kincaid, malfunction and breakdown and/or startup authorization is already provided under Illinois’ rules. The relevant permit applications contained the applicable forms and provided the relevant information specified by the applicable state rules. The Illinois EPA reviewed these requests and granted authorization to the source in the CAAPP permit to make claims of malfunction and breakdown and/or startup, as appropriate. The planned CAAPP permit would clearly set forth the emission units, types of authorization provided (i.e., malfunction/breakdown and/or startup), and the requirements that have been imposed in conjunction with such authorizations.

These authorizations in the CAAPP permit do not equate to an “automatic exemption” from otherwise applicable state emission standards. The grant of initial authorizations for violations of state emission standards during startup and certain malfunctions and breakdowns was and, for Kincaid, will be fully consistent with long standing practice in Illinois for permitting and enforcement. Due to the nature of power plants and the inability to simply shutdown coal-fired boilers and the nature of the start-up of coal-fired boilers, excess emissions may occur during startup or malfunction and breakdown that the source cannot readily anticipate or reasonably avoid. However, as the source should be fully aware, it may be held accountable for any excess emissions that occur regardless of any authorization in the CAAPP permit related to malfunction and breakdown events and startup.

In summary, the provisions in the SIP and the CAAPP permit that delineate the elements for a viable claim of malfunction/breakdown or startup do not translate into any advance determination related to actual occurrences of excess emissions. Rather, together they provide a framework whereby a source is provided with the ability to make a claim of malfunction/breakdown or startup, with the viability of any such claim subject to specific review against the relevant requirements. In this regard, 35 IAC 201.265 clearly states that violating an applicable state standard even if consistent with any express authorization regarding malfunction/breakdown or startup in a permit shall only constitute a prima facie defense to an enforcement action for the violation of such standard. The provisions in the CAAPP permit related to malfunction and breakdown and startup do not provide any shield from state
emission standards that may be violated during such events. Any excess emissions during these events could potentially be the subject of enforcement actions.

7.10 Incorporation by Reference

Based on USEPA guidance, as found in USEPA’s White Paper 2\(^{21}\) and petition responses by the Administrator of USEPA, Title V permit authorities may, within their discretion, incorporate required plans into a Title V by reference. As recognized in White Paper 2, permit authorities can effectively streamline the contents of a Title V permit, avoiding the clutter of restated text. However, it is also recognized that the benefits of incorporation of plans must be carefully balanced by a permit authority with its duty to issue permits in a way that is “clear and meaningful” to the permittee and the public.

As related to incorporation by reference, USEPA guidance stresses the importance of identifying, with specificity, the object of the incorporation.\(^{22}\) Accordingly, for conditions in CAAPP permits that incorporate plans, the general practice of the Illinois EPA is to briefly describe the subject plan and manner in which it applies to the source. Identifying the nature of the source activity, the regulatory requirements or the nature of the equipment associated with the plan is consistent with recommendation of White Paper 2. The actual contents of plans are not restated in the permit, as this would plainly defeat the purpose of incorporating material by reference, as recognized by relevant USEPA guidance.

Due to changing circumstance or by underlying rules or requirements, plans need to be revised from time to time. Except where expressly precluded by the relevant rules, the CAAPP Permit allows the Permittee to make future changes to plans without undergoing formal permit revision procedures. This approach will allow flexibility to make required changes to a plan without separately applying for a revised permit and, similarly, will lessen the impacts that could result for the Illinois EPA if any change to a plan required a permitting transaction. When revised plans are submitted to the Illinois EPA during the permit term, changes to the incorporated plans are automatically incorporated into the CAAPP Permit unless otherwise provided by the permit.

7.11 Periodic Monitoring

Pursuant to Section 504(c) of the Clean Air Act, Illinois’ CAAPP permit must set forth monitoring requirements, commonly referred to as “Periodic Monitoring”, to assure compliance with the applicable emission standards, emission limits and other substantive requirements of the permit. As a general matter, the required content of a CAAPP Permit with respect to such Periodic

\(^{21}\) Memorandum, White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program, March 5, 1996, Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, USEPA, to Directors, Air Regional Offices, USEPA.

\(^{22}\) Past USEPA petition responses have stated that permit authorities must ensure the following: (1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of the document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation.
Monitoring is addressed in Section 39.5(7) of the Act.\(^{23}\) Section 39.5(7)(b) of the Act\(^{24}\) provides that in a CAAPP Permit:

The Agency shall include among such conditions applicable monitoring, reporting, record keeping and compliance certification requirements, as authorized by paragraphs (d), (e), and (f) of this subsection, that the Agency deems necessary to assure compliance with the Clean Air Act, the regulations promulgated thereunder, this Act, and applicable Board regulations. When monitoring, reporting, record keeping and compliance certification requirements are specified within the Clean Air Act, regulations promulgated thereunder, this Act, or applicable regulations, such requirements shall be included within the CAAPP Permit.

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirements in relevant Title I permits are not accompanied by compliance methodologies, it is necessary for monitoring requirements to be established in a CAAPP Permit.\(^{25}\) Monitoring requirements must also be established when standards and control requirements are accompanied by compliance methodologies but those methodologies are not adequate to assure compliance with the applicable standards or requirements. For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements, must be determined by the permitting authority based on its knowledge.

\(^{23}\) The provisions in the Act for Periodic Monitoring in CAAPP permits reflect parallel requirements in the federal guidelines for State Operating Permit Programs, 40 CFR 70.6(a)(3)(i)(A), (a)(3)(i)(B), and (c)(1).

\(^{24}\) Section 39.5(7)(d)(ii) of the Act further provides that a CAAPP Permit shall:

Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), require Periodic Monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit ...

Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain “Compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit.”

\(^{25}\) The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with those requirements.
experience and judgment. For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for many emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

The Periodic Monitoring for a unit may also include measures, such as emission testing, that would only be required once or only upon specific request by the Illinois EPA. These requirements are typically accompanied by monitoring requirements would apply on a regular basis. When emission testing or other measure is only required upon request by the Illinois EPA, it is included as part of the Periodic Monitoring for an emission unit to facilitate a response by the Illinois EPA to circumstances that were not contemplated when Monitoring was being established, such as the handling of a new material or a new mode of operation. Such monitoring would also serve to provide further verification of compliance, along with other potentially useful information. As emission testing provides a quantitative determination of compliance, it would also provide a determination of the margin of compliance with the applicable limit(s) and serve to confirm that the Monitoring required for an emission unit on a regular basis is reliable and appropriate. Such testing might also identify specific values of operating parameters of a unit or its associated control equipment that accompany compliance and can be relied upon as part of regular Monitoring.

26 The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); see also 40 CFR 70.6(a)(3)(1)(B); see also, In the Matter of CITGO Refinery and Chemicals Company L.P., Petition VI-2007-01 (May 28, 2009); see also, In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana, Petition VI-2009-01 (May 27, 2010); see also, In the Matter of Wisconsin Public Service Corporation’s JP Pulliam Power Plant, Petition V-2009-01 (June 28, 2010).
Attachment 1 - Other Changes Planned by Minor Modification

Introduction

In parallel with this reopening proceeding and the planned significant modifications to the CAAPP permit, the Illinois EPA is also planning to make certain revisions to the CAAPP permit by minor modification. These changes would be made to remove outdated language, improve language, or correct language. Pursuant to Section 39.5(14)(a) of the Act, the planned changes listed below are all minor modifications. Pursuant to Section 39.5(14)(a)(v) of the Act, the Illinois EPA may not issue a revised CAAPP permit by minor modification until after a 45-day 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. However, the Illinois EPA can approve the permit modification prior to that time. Pursuant to Section 39.5(14)(a)(vi) of the Act, the Permittee may make the change proposed in its minor permit modification application immediately after it files such application. After the Permittee makes the changes, and until the Illinois EPA takes final action, the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the Permittee need not comply with the existing permit terms and conditions that it seeks to modify. If the Permittee fails to comply with its proposed permit terms and conditions during this period, the relevant existing permit terms and conditions may be enforced. Pursuant to Section 39.5(14)(a)(vii) of the Act, changes that are minor modifications are not covered by any permit shield pursuant to Section 39.5(7)(j) of the Act.

Designation of “Permittee”

In various places in the CAAPP permit, the phrase “owner or operator” would be replaced with “Permittee” for permit provisions where an obligation is being imposed on a Permittee. The changes of “owner or operator” to “Permittee” are not individually discussed in the Statement of Basis.

Change in Section 4 of the Permit: Emission Units

Condition 4.0

27 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 this source are not administrative amendments 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.
A row for Insignificant Activities would be added and the title would be updated to remove the word “SIGNIFICANT”. A note indicating that the information and descriptions in the table are for informational purposes only would also be added. Also additional revisions would be made to the table to conform with other sections of the permit.

Changes in Section 5 of the Permit: Overall Source Conditions

Condition 5.2.2

A reference to the various compliance procedures in Section 7 of the permit would be added, and in Condition 5.2.2(b) the word “and” would be changed to “or” for improved clarity.

Condition 5.5.1

This condition would be revised to improve clarity.

Changes in Section 6: Conditions for Emission Control Programs

Condition 6.2

The Acid Rain Program language would be updated for improved clarity and consistency.

Condition 6.2.3

Clarification would be made that opacity is monitored using a continuous opacity monitoring system (COMS) not a CEMS.

Changes in Section 7.1: Unit Specific Conditions for the Coal-Fired Boilers

Condition 7.1.3(b) and (c)

These conditions would be revised to more clearly identify or cross reference the specific standards related to the Permittee authorizations for continued operations during startup or malfunction/breakdown events. The phrase “at a minimum” would be removed for consistency and clarity.

Condition 7.1.4(a)

The condition would be revised to improve clarity and to conform to the phrasing used in Conditions 7.1.4(g)-(l).

Condition 7.1.4(b)

The applicable PM limit would be corrected to match state rules.

Condition 7.1.4(c)

The equation used in the state standard for SO₂ emissions was updated in 2006 and would therefore be updated in this condition. The actual calculated standard did not change.
Condition 7.1.4(e) and (g)

Condition 7.1.4(e) would be removed and the reference to the Acid Rain Program Permit would be added in Condition 7.1.4(g).

Condition 7.1.5(a)

The origin of authority would be added to this condition. In addition, wording would be changed to clarify that solid fuel refers to coal, and that “other fuels” refers to natural gas or liquid fuel. The new wording would better track the regulatory language.

Condition 7.1.7(a)(i)

An obsolete reference to testing done after December 21, 2003, would be removed.

Condition 7.1.7(a)(ii)

The obsolete references to Condition 5.10 and effectiveness of the condition would be removed.

Condition 7.1.7(a)(iii)

The applicable PM limit would be corrected to match state rules.

Conditions 7.1.7(a)(v)(A), (B) and (C) and 7.1.7(e)(iii)(F)

“Process wastes” would no longer be mentioned in this condition. This is because the Permittee is not allowed to burn such materials. This will maintain the non-applicability statement for 40 CFR 63 Subpart CCCC, as would be added in Condition 7.1.5. Also, the statement concerning the use of alternate fuel would be updated for clarity and consistency. In Condition 7.1.7(a)(v)(A) the obsolete references to Condition 5.10 and effectiveness of the condition would also be removed.

Condition 7.1.8(a)(ii)

The reference to opacity would be updated to reflect the change that would be made in Condition 7.1.4(a) which would cross-reference Condition 5.2.2(b).

Condition 7.1.9(a)

References to “process wastes” would be removed as discussed above, and “operating records” would be revised to “operational records” for improved clarity.

Conditions 7.1.9(c), (d), (e) and (h)

The phrase “as a minimum” would be removed to improve clarity and consistency, in addition to other minor wording or phrase changes.

Conditions 7.1.9(d)(i)(A) and 7.1.9(e)(i)(A)
The condition would be revised to include applicable units for emission data (lb/mmBtu).

**Conditions 7.1.9(d)(i)(F)**

A cross-reference to reporting requirements would be updated.

**Conditions 7.1.9(g)(ii)(C)**

Recordkeeping requirements would be combined for clarity and consistency.

**Condition 7.1.9(h)(ii)(D), (E) and (F)**

Cross-references to opacity, PM and CO standards in the permit would be added for clarity.

**Condition 7.1.10-2(a)(i)(D)**

The word “maintained” would be added for clarity.

**Condition 7.1.10-2(a)(iii)(B)**

An obsolete reference to the first four quarterly reports would be removed.

**Condition 7.1.10-2(b)(iii)**

The condition would be updated for clarity and consistency.

**Condition 7.1.10-2(d)(iii)(A)(III)(B)**

The words “and stop” would be removed from the reporting requirements. “Stop” time is unnecessary as it would always be six minutes after the reported start time since reporting is based on six-minute block averages.

**Condition 7.1.10-2(e)(ii)(A)(iv)**

The phrase “affected boilers” would be changed to “unit” to be consistent with the regulatory requirement.

**Condition 7.1.10-3(a)(i)**

A minor revision would be made to the parenthetical to better track the language that precedes the parenthetical by adding the phrase “within a two-hour period.”

**Condition 7.1.11**

An additional regulatory citation would be added.

**Condition 7.1.11(c)**

References to wood and process wastes and to boiler cleaning residue would be removed from the condition as discussed previously.
Condition 7.1.12(a)(i)

A reference to opacity would be changed to Condition 5.2.2(b) for clarity and consistency.

Changes in Sections 7.2 and 7.3: Unit Specific Conditions for Coal Handling and Processing Equipment

Condition 7.2.3(b) and 7.3.3(b)

These conditions would be revised to clarify cross-references.

Condition 7.2.4(a) and (b)

The conditions would be revised for improved clarity to conform to the formulation used in Condition 7.1.4(a) of the planned permit.

Condition 7.2.5(b)

The non-applicability statement concerning the NSPS, Subpart Y, would be updated, to reflect the new citation, and revised to better track regulatory language.

Condition 7.2.8(a)(ii)

An applicable requirement identified as a T1R would now be classified as a T1 condition since it is not being revised in this permitting action. The T1R revision was made through a prior permitting action, effective February 5, 2015. Also, the origin of authority would be updated to specify the original construction permit 97080088.

Conditions 7.2.9 and 7.3.9

The origin of authority would be moved prior to Conditions 7.2.9(a) and 7.3.9(a) to reflect that the origin of authority applies to each entire condition, not just Conditions 7.2.9(a) and 7.3.9(a)). Also, the word “available” would be added concerning information on design control efficiency to reflect that the information may not be available due to the age of the equipment.

Condition 7.2.9(g)

An additional cross-reference for recordkeeping requirements would be added for clarity.

Conditions 7.3.1 and 7.3.2

The phrase “dust collection device” would be changed to “dust collection equipment” for clarity and consistency.

Condition 7.3.3(a)(ii)
A regulatory citation would be added to the condition and the affected equipment would be updated to list coal crushers for clarity.

**Condition 7.3.4(a) and (b)**

The conditions would be revised for improved clarity and to conform to the formulation used in Condition 7.1.4(a) of the planned permit.

**Condition 7.3.4(d)**

The condition would be updated to reflect the current citation for the applicable NSPS, and the language of the condition would be revised to more closely track the language of the regulations.

**Changes in Section 7.4: Unit Specific Conditions for the Fly Ash Equipment**

**Condition 7.4.3(b)**

The condition would be revised to clarify cross-references.

**Condition 7.4.4(a) and (b)**

The conditions would be revised for improved clarity and to conform to the formulation used in Condition 7.1.4(a) of the planned permit.

**Condition 7.4.9**

The introductory clause of this condition would be revised to eliminate redundancy.

**Changes in Section 7.5: Unit Specific Conditions for the Auxiliary Boiler**

**Condition 7.5.1**

The description would be updated to reflect that the auxiliary boiler is equipped with a continuous oxygen trim system.

**Condition 7.5.4(a)**

The condition would be revised for improved clarity and to conform to the formulation used in Condition 7.1.4(a) of the planned permit.

**Condition 7.5.6(c)**

The origin of authority would be added to the requirement to burn only natural-gas in the affected boiler.

**Conditions 7.5.12(b) and (c)**

Compliance procedures would be updated to include additional work practices that were added to the permit.

**Changes in Section 7.6: Gasoline Storage Tank**
Condition 7.6.1

The description of the gasoline storage tank would be revised for clarity.

Condition 7.6.2

The list of emission units would be revised to include submerged loading pipe in the description and removal from the control equipment since it is considered a passive control device.

Condition 7.6.4

The condition would be revised to remove the alternative compliance method since it does not apply to gasoline.

Condition 7.6.9

The condition would be revised for clarity and consistency.

Condition 7.6.12

Compliance procedures would be revised for clarity and consistency.

Changes in Section 9.0: Standard Permit Conditions

Condition 9.8

The requirement to submit annual compliance certifications to USEPA would be removed since they are no longer required by USEPA.

Changes in Section 10.0: Attachments

Attachments 1 and 2

Minor changes would be made to conform to the regulatory language.
Attachment 2 - Other Changes by Administrative Amendment

Introduction

In parallel with this reopening proceeding, the modifications to the permit to fully approve the CAM Plan, other significant modifications and minor modifications to the permit, a number of changes to the CAAPP permit by administrative amendment would also occur. Descriptions of these changes, other than changes that will be made to correct errors in grammar or punctuation, are provided below. Permit changes to correct errors in grammar or punctuation will not be discussed individually.

Pursuant to Section 39.5(13) of the Act, these changes would all be administrative changes to the permit.28 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 make these changes to the permit, provided that these revisions are designated as having been made pursuant to the CAAPP’s procedures for administrative amendments to CAAPP permits. The source may also implement the changes addressed in its request for an administrative amendment of the permit immediately upon submittal of the request. These changes are not covered by any permit shield pursuant to Section 39.5(7)(j) of the Act.

Formatting Changes throughout the Permit:

A header that includes the Section and Subsection of the permit will be added to all pages of the permit. This change will be made for ease of navigation through the permit. The footer will be also modified on all pages of the permit to include the name of the facility, ID number and permit number, as well as the page number. This change will be made to reduce confusion among the CAAPP permits for different facilities.

Deleted or Blank Conditions:

Several obsolete conditions were removed in their entirety from the permit. In addition, several conditions contained no applicable requirements and, in lieu of stating “none”, would now be deleted. In order to reduce confusion from deleted condition numbers that would require renumbering subsequent condition numbers and therefore require multiple updates to cross-references, the existing requirements in the conditions would be removed and the conditions would state “Intentionally Blank.” Where deletion of a condition would not require renumbering subsequent conditions, the conditions have been deleted in their entirety and the phrase “Intentionally Blank” has not been added.

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28 Section 39.5(13) of 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 Act. All the planned administrative changes to the CAAPP permit for this source fall into the following categories: Correct typographical errors; identify a change in the name, address, or phone number of any person identified in the permit, or provide a similar minor administrative change at the source; or any other type of change which has been determined to be similar to those above.
**Word Changes throughout the Permit:**

Numerous replacements of the word “log” or “logs” with “record” or “records” would be made throughout the permit for improved clarity and to be consistent with changes made to permits for other coal-fired power plants. These changes will not be discussed individually in the Statement of Basis.

Any condition which referred to use of a USEPA Test Method would be changed to Reference Method for consistency throughout the permit.

The words “testing” and “measurement” would be changed to “observations” in any provision involving or related to the use of Reference Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources).

Conditions using the phrase “within [period of time] of” or a similar variation would be changed to “not later than [period of time] after” throughout the permit.

**Changes in Section 1 of the Permit: Introduction**

**Condition 1.1**

The source identification would be changed from “Kincaid Generating Station” to “Kincaid Power Station” to reflect current terminology used by the Permittee.

**Changes in Section 6: Conditions for Emission Control Programs**

**Condition 6.2.1**

References to BLR-1 and BLR-2 boiler designations will be added for clarity.

**Changes in Section 7.1: Unit Specific Conditions for the Coal-Fired Boiler**

**Conditions 7.1.1**

The acronym for over-fired air (OFA) would be added for clarity.

**Condition 7.1.4(f)(i)(B)**

The word “Condition” would be added before 7.1.4(f)(i)(A) for clarity and consistency.

**Condition 7.1.13-2(f)**

Clarification that the citation is to the Illinois Environmental Protection Act would be made in the condition.

**Changes in Section 7.4: Fly Ash Handling Equipment**

**Condition 7.4**

The title would be updated to include the word “Handling” for clarity and consistency.
**Changes in Section 7.6: Gasoline Storage Tank**

**Condition 7.6**

The title would add the word “Gasoline” for clarity.

**Changes in Section 8.0: General Permit Conditions**

**Condition 8.2**

A clarification that Section 6.2 is referring to Section 6.2 of the CAAPP permit would be made.

**Condition 8.6.4**

Addresses for the Illinois EPA would be updated.

**Changes in Section 9.0: Standard Permit Conditions**

**Condition 9.4**

Addresses for the Illinois EPA would be updated.

**Changes in Section 10.0: Attachments**

**Attachment 5**

The revised Acid Rain Program permit would be included as Attachment 5 of the CAAPP permit. The Acid Rain Program permit was revised in a separate permitting action and is incorporated by reference as stated in the CAAPP permit cover letter.