Statement of Basis

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

Illinois Power Generating Company
Newton Power Station

Illinois EPA ID No. for the Source: 079808AAA
Federal ORIS* Code for the Source: 6017
CAAPP Permit No.: 95090066

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

* Office of Regulatory Information Systems (ORIS)
TABLE OF CONTENTS

PREFACE

INTRODUCTION

CHAPTER 1 - HISTORICAL AND LEGAL BACKGROUND TO THE PLANNED ACTIONS

1.1 Historical Background
1.2 The Current CAAPP Permit Reopening Proceeding
1.3 Planned Full Approval of the CAM Plan for PM Emissions of the Boilers
1.4 Other Planned Revisions to Provisions of the CAAPP Permit
1.5 Parallel CAAPP Permitting Actions
1.6 Issuance of a Revised Acid Rain Program Permit for the Newton Power Station

CHAPTER 2 - FACTUAL BASIS FOR THE PLANNED CAAPP PERMIT ACTIONS

2.1 Description of the Source
2.2 Ambient Air Quality Status for the Area
2.3 Major Source Status
2.4 Fee Schedule
2.5 Construction Permits

CHAPTER 3 - PLANNED CHANGES TO THE CAAPP PERMIT THROUGH REOPENING

CHAPTER 4 - PLANNED CHANGES FOR THE COMPLIANCE ASSURANCE MONITORING (CAM) PLANS

4.1 CAM Monitoring Approach
4.2 CAM PM Testing
4.3 CAM Averaging Period
4.4 CAM Excursion
4.5 CAM Excursion Corrective Action
4.6 CAM Reporting Requirements
4.7 CAM Recordkeeping Requirements
4.8 Planned Changes to the CAAPP Permit

CHAPTER 5 - OTHER PLANNED REVISIONS TO THE CAAPP PERMIT THROUGH SIGNIFICANT MODIFICATION

CHAPTER 6 - PLANNED ISSUANCE OF A REVISED ACID RAIN PROGRAM PERMIT

CHAPTER 7 - SUPPLEMENTAL INFORMATION

7.1 Coal-Fired Boilers
7.2 Coal Handling Equipment
7.3 Fly Ash Handling Equipment
7.4 Gasoline Storage Tank
7.5 Limestone and Gypsum Handling Equipment
ATTACHMENTS

Attachment 1: Other Changes Planned by Minor Modification
Attachment 2: Other Changes by Administrative Amendment
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 Newton Power Station (Newton) 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 Newton that was issued by the Illinois EPA on November 19, 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.

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 Newton. 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 issuance, renewal or significant modification of a CAAPP permit. Statements of Basis are intended to aid the public in understanding the relevant facts and legal underpinnings of planned actions on CAAPP permits and the draft CAAPP permits that have been prepared by the Illinois EPA.\(^2\) In this instance, this Statement of Basis addresses the reopening of the CAAPP permit for the Newton Power Station that is planned by the Illinois EPA. The Illinois EPA must also prepare a Statement of Basis for a planned significant action on an Acid Rain Program permit.

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

---

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

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

The Newton Power Station (Newton) is a coal power plant with two coal-fired electrical generating units. The initial CAAPP\textsuperscript{3} permit for Newton 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.\textsuperscript{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 November 19, 2015, when a revised CAAPP permit was issued for Newton, and on April 21, 2016, when the Board granted a voluntary dismissal of the appeal by the Permittee.\textsuperscript{5} The CAAPP permit for Newton can and is now being brought up-to-date by the Illinois EPA through a permit reopening proceeding.

\textsuperscript{3} The Clean Air Act Permit Program (CAAPP) is the operating permit program established in Illinois for stationary sources of emissions that is required by Title V of the federal Clean Air Act (CA Act). 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. Illinois’ CAAPP has been approved by USEPA as meeting the requirements for a Title V permit program. The CAAPP is administered by the Illinois EPA in conjunction with other state permitting programs for stationary sources of emissions. CAAPP permits contain conditions identifying the federal and state emission control requirements that apply to the various emission units at sources. They also contain detailed conditions establishing “monitoring”, including operating practices, emission testing, emissions monitoring, operational monitoring, recordkeeping and reporting, that subject sources must implement to confirm they are operating in compliance with applicable emission control requirements. The 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).

\textsuperscript{4} Newton is subject to a variety of federal and state emission standards and emission control requirements, which are the legal basis for the conditions in this CAAPP permit that limit emissions. Certain other requirements have their origin in 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.

\textsuperscript{5} Illinois Power Generating Company was known as Ameren Energy Generating Company when the initial and revised CAAPP permits were issued. For simplicity, the Statement of Basis consistently refers to the company by its current name, Illinois Power Generating Company, or as the Permittee.
This Statement of Basis supports the revisions to the CAAPP permit for the Newton 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 actions. 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 permit changes, constituting significant modifications, that would be made in conjunction with the planned full approval of the Permittee’s Compliance Assurance Monitoring (CAM) Plans for the particulate matter (PM) emissions of the coal-fired boilers, including a review of the results of the emissions testing that was completed as required by the conditional approval of the CAM Plans. Chapter 5 discusses other planned significant modifications requested by the Permittee to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and other refinements to the permit now being requested by the Permittee.

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 Newton. This revised permit, which would take the place of the permit that is attached to the current CAAPP permit for Newton, is addressed in Chapter 6 of this Statement of Basis.

General background on the emission units at the Newton plant and requirements under the current CAAPP permit is provided in Chapter 7 of this Statement of Basis.
Chapter 1 - Historical and Legal Background to the Planned Actions

CHAPTER 1 – HISTORICAL AND LEGAL BACKGROUND TO THE PLANNED ACTIONS

1.1 Historical Background for the CAAPP Permit

Illinois Power Generating Company (the “Permittee”) owns a coal-fired electric power plant known as the Newton Power Station (“Newton”). This power plant is located at 6725 North 500th Street, Newton, Illinois. In addition to coal-fired boilers, this plant has ancillary equipment and operations, including coal handling, fly ash handling, gasoline storage, and is installing limestone and gypsum handling.

The Permittee filed an application with the Illinois EPA on September 29, 1995 for a CAAPP permit for Newton. The application was assigned Application No. 95090066. 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 Newton 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 Newton. 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 November 19, 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 November 19, 2015, the Illinois EPA issued a revised CAAPP permit for Newton 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

---

6 The Source Identification (ID) Number historically assigned to the Newton Power Station by the Illinois EPA is 079808AAA.
7 The expiration date specified on the face of the initial CAAPP permit was September 29, 2010, which reflected the five-year permit term required by the CAAPP.
Chapter 1 - Historical and Legal Background to the Planned Actions

began on December 21, 2015. The purpose of this reopening proceeding is to address additional requirements in the CAAPP permit, i.e., requirements under the Clean Air Act that have become applicable to Newton 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: the Illinois Mercury Rule (35 IAC Part 225); the Mercury and Air Toxics Standards (MATS), 40 CFR 63 Subpart UUUU; 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 Newton are also being 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 draft CAAPP permit and accompanying Statement of Basis, a public comment period and notice to the State of Indiana 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 subject 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 of a revised CAAPP permit is extended, the public comment period will close on August 13, 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 Newton that would fully approve the Permittee’s Compliance Assurance Monitoring (CAM) Plans for Newton’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 Plans, 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 4, 2016. 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

---

---
Chapter 1 - Historical and Legal Background to the Planned Actions

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 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 CAAPP Permitting Actions

In addition to the planned revisions to the CAAPP permit for Newton discussed above, 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
Chapter 1 - Historical and Legal Background to the Planned Actions

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 Newton Power Station

Under the federal Acid Rain Program, the Permittee has applied for a revised Acid Rain Permit for Newton. 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 Newton, 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 Newton, also contributing to bringing the CAAPP Permit for Newton 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 CAAPP PERMIT ACTIONS

2.1 Description of the Source

At the Newton Power Station, two coal-fired boilers are operated to generate electrical power. This facility is located at 6725 North 500th Street, Newton, Illinois. 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: Jasper County

The revised CAAPP permit for Newton 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>Coal Boiler 1 (NB-1)</td>
<td>Coal-Fired Boiler</td>
</tr>
<tr>
<td>Coal Boiler 2 (NB-2)</td>
<td>Coal-Fired Boiler</td>
</tr>
<tr>
<td>Coal Handling Equipment</td>
<td>Coal Receiving, Transfer and Storage 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>Gasoline Storage Tank</td>
<td>Gasoline Storage Tank - 1,000 Gallon</td>
</tr>
</tbody>
</table>

Additional Emission Units to Be Addressed by the Planned Revised Permit

<table>
<thead>
<tr>
<th>Emission Unit(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone and Gypsum Handling Equipment</td>
<td>Equipment for Handling Limestone and Gypsum Associated with the Wet Flue Gas Desulfurization (WFGD) Systems for Coal Boilers NB-1 and NB-2 (Construction is presently ongoing for the handling equipment and WFGDs).</td>
</tr>
</tbody>
</table>

2.2 Ambient Air Quality Status for the Area

Newton 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),¹⁰ sulfur dioxide (SO₂), carbon monoxide (CO), ozone and lead. (See 40 CFR 81.314, Attainment Status Designations: Illinois)

2.3 Major Source Status

Newton requires a CAAPP permit because it is considered a major source for emissions of the following regulated pollutants: nitrogen oxides (NOₓ),

¹⁰ PM₂.₅ and PM₁₀ are particles with aerodynamic diameters less than or equal to 2.5 and 10 microns, respectively.
volatile organic material (VOM), PM$_{2.5}$, PM$_{10}$, SO$_2$, 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.$^{11}$

Pursuant to Section 39.5(2)(a)(iii) of the Act, the facility also requires a CAAPP Permit as it is an “affected source” for the purposes of the federal Acid Rain Program established by Title IV of the Clean Air Act.

The actual annual emissions of regulated pollutants from Newton, as reported by the Permittee 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>732.1</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>2,195.2</td>
</tr>
<tr>
<td>PM</td>
<td>784.9</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>12,805.4</td>
</tr>
<tr>
<td>VOM</td>
<td>87.9</td>
</tr>
<tr>
<td>CO$_2$</td>
<td>5,285,410.4</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.016</td>
</tr>
<tr>
<td>HCl</td>
<td>26.5</td>
</tr>
<tr>
<td>HF</td>
<td>22.4</td>
</tr>
</tbody>
</table>

### 2.4 Fee Schedule

Emission limitations are not set for this source for the purpose of permit fees. The Permittee shall be required to pay the maximum fee, pursuant to Section 39.5(18)(a)(ii)(A) of the Act.

### 2.5 Construction Permits

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

---

$^{11}$ The source has voluntarily submitted data for actual emissions of GHGs from this source in its Annual Emission Reports (AER). However, Newton 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 PBR 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.
Chapter 2 – Factual Basis for the Planned CAAPP Permit Actions

### Construction Permits for Units or Equipment for which Construction has been completed

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Date Issued*</th>
<th>Date Revised*</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>08010049</td>
<td>September 11, 2013</td>
<td></td>
<td>Sorbent Injection Systems and Fuel Additive System for Units 1 and 2</td>
</tr>
<tr>
<td>10070051</td>
<td>December 20, 2010</td>
<td>June 29, 2016</td>
<td>Addition of Flue Gas Desulfurization Systems(^\text{12}) (Emergency Generator Diesel Engines)</td>
</tr>
</tbody>
</table>

* Date of most recent revision if the permit has been revised.

### Construction Permits for Units or Equipment for which Construction has not been completed

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Date Issued*</th>
<th>Date Revised*</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>10070051</td>
<td>December 20, 2010</td>
<td>June 29, 2016</td>
<td>Addition of Flue Gas Desulfurization Systems(^\text{13})</td>
</tr>
</tbody>
</table>

* Date of most recent revision if the permit has been revised.

### List of TIR Conditions in the CAAPP Permit

<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Type</th>
<th>Condition</th>
<th>Reason for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>08010049</td>
<td>TIR</td>
<td>7.1.9(j)(i)</td>
<td>Operating records for sorbent usage would have no longer been required after complying using 35 IAC 225.233(d) in 2013.</td>
</tr>
<tr>
<td>98080051</td>
<td>TIR</td>
<td>7.2.6(b)(iii)</td>
<td>Total PM limits were incorrectly set at 102 tons/year; they were corrected to 112 tons/year.</td>
</tr>
</tbody>
</table>

### Applicable conditions that originated from these construction permits were incorporated into this current CAAPP permit.

<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Date Issued*</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>77060001</td>
<td>4/27/1995</td>
<td>Newton Storage Tanks</td>
</tr>
<tr>
<td>77060002</td>
<td>1/19/2000</td>
<td>Diesel Oil Storage Tank</td>
</tr>
<tr>
<td>78080036</td>
<td>7/30/1998</td>
<td>Steam Generating Unit NB-1</td>
</tr>
<tr>
<td>79020027</td>
<td>11/23/1998</td>
<td>Upgraded Coal Handling System</td>
</tr>
<tr>
<td>79070034</td>
<td>8/11/2000</td>
<td>Fly Ash Dust Collector</td>
</tr>
<tr>
<td>79070035</td>
<td>3/1/1993</td>
<td>Lime and Soda Ash Handling</td>
</tr>
<tr>
<td>83020010</td>
<td>6/29/2001</td>
<td>Steam Generating Unit NB-2</td>
</tr>
<tr>
<td>94040004</td>
<td>6/8/1994</td>
<td>Incorporated into 78080036</td>
</tr>
</tbody>
</table>

\(^{12}\) The WFGD Systems are currently under construction with an estimated in-service date of Spring 2019 for the first unit and 12 months later for the second unit. To date, the Permittee has met all required milestones for the project as specified in the IPCB variance discussed in the Statement of Basis. Emergency generator diesel engines have been installed, but the construction of the limestone and gypsum handling equipment is not complete.

\(^{13}\) See Footnote 12.
### Chapter 2 - Factual Basis for the Planned CAAPP Permit Actions

<table>
<thead>
<tr>
<th>Permit</th>
<th>Reason</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>95080075</td>
<td>Modification of SO3 Flue Gas System</td>
<td>10/5/1995</td>
</tr>
<tr>
<td>95090145</td>
<td>New SO3 Flue Gas Conditioning System</td>
<td>10/5/1995</td>
</tr>
<tr>
<td>97020105</td>
<td>Fly Ash Dust Collector</td>
<td>5/12/1997</td>
</tr>
<tr>
<td>99070011</td>
<td>Car Dumper Dust Collector</td>
<td>8/26/1999</td>
</tr>
<tr>
<td>00070032</td>
<td>Fly Ash Handling System</td>
<td>8/24/2000</td>
</tr>
<tr>
<td>00100060</td>
<td>Newton 2 low NOx burners</td>
<td>9/28/2001</td>
</tr>
<tr>
<td>01010021</td>
<td>Newton 1 &amp; 2 Flue Gas Conditioning System</td>
<td>1/25/2001</td>
</tr>
<tr>
<td>01030065</td>
<td>Newton 2 Primary Air Duct Burner</td>
<td>4/24/2001</td>
</tr>
<tr>
<td>02120049</td>
<td>Fly Ash Batch Mixer</td>
<td>3/7/2003</td>
</tr>
</tbody>
</table>

*Date Issued or last revised*

#### Construction permits that have been withdrawn

<table>
<thead>
<tr>
<th>Original Permit</th>
<th>Reason</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>00050035</td>
<td>Withdrawn</td>
<td>Cooling Towers</td>
</tr>
<tr>
<td>08050050</td>
<td>Withdrawn</td>
<td>NOx Selective Noncatalytic Reduction</td>
</tr>
<tr>
<td>09050032</td>
<td>Withdrawn</td>
<td>Pilot Study of Fuel Additives</td>
</tr>
<tr>
<td>10080006</td>
<td>Withdrawn</td>
<td>Mercury Control Test Program</td>
</tr>
<tr>
<td>11060023</td>
<td>Withdrawn</td>
<td>Additive Injection System</td>
</tr>
<tr>
<td>11070007</td>
<td>Withdrawn</td>
<td>Fuel Additive System for Units 1 &amp; 2</td>
</tr>
</tbody>
</table>
Chapter 3 - Planned Changes to the CAAPP Permit Through Reopening

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 Newton.\textsuperscript{14}

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), CAIR (Clean Air Interstate Rule), CSAPR (Cross-State Air Pollution Rule), FGD (Flue Gas Desulfurization), GWh (Gigawatt-Hour), PM CPMS (Particulate Matter Continuous Parameter Monitoring System), MATS (Mercury And Air Toxics Standards), MWh (Megawatt-Hour), PM\textsubscript{2.5} (Particulate Matter\textsubscript{2.5}), RATA (Relative Accuracy Test Audit), TBtu (Trillion Btu), TR (Transport Rule) and WFGD (Wet Flue Gas Desulfurization).

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

Condition 3.1.1

The activated carbon injection (ACI) silo and delivery system and the sorbent injection pilot system would be added to the list of insignificant activities, reflecting the addition of ACI and temporary sorbent injection systems on the coal-fired boilers to control mercury and SO\textsubscript{2} emissions, respectively.

Condition 3.4

Two emergency generator diesel engines have been installed at Newton to provide electricity to the WFGD systems (which are currently under construction) on an emergency basis during interruptions or outages of normal power supply. The engines are also operated for maintenance and readiness checks. As emergency engines, they have limited requirements for both NSPS and NESHAP regulations. They are also classified as insignificant activities pursuant to 35 IAC 201.210(a)(16). Applicable requirements would be added in Conditions 3.4.1 through 3.4.11.

Changes in Section 5.0: Overall Conditions

Condition 5.1.3

A co-located facility at the site would be referenced in the revised CAAPP permit. A Coal Additive Facility has been constructed at Newton to introduce

\textsuperscript{14} 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.”
additives to the coal delivered to the coal-fired boilers. The additives are intended to reduce emissions when the coal is burned in the boilers. A CAAPP permit application for Jasper Fuels was submitted on 10/23/2013 and is currently pending.

**Condition 5.9**

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 prior to issuance of the current CAAPP permit. This requirement is now moot and would be removed.

**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. Because the time periods addressed by this condition have passed, the condition would be removed.

**Changes in Section 6.0: Conditions for Emissions Control Programs**

**Section 6.1: NOx Trading Program**

Section 6.1 contains conditions related to the permit because the NOx Trading Program addressed by 35 IAC 217 Subpart W, which no longer exists. The requirements under the program expired in 2009. The requirements, therefore, would be removed and Section 6.1 of the permit would be left intentionally blank.

**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.

---

15 Under the Clean Air Act, to reduce emissions of visibility impairing air pollutants, NOx, SO2, and PM, certain stationary sources must be subject to a Best Available Retrofit Technology (BART) standard. While BART was initially noted in the reopening notification letter as an applicable requirement that would be added to the permit in the Newton reopening, the Illinois EPA determined that was an error. The units at Newton are not subject to BART because the boiler startup dates were after August 7, 1977. See Appendix Y to 40 CFR Part 51 for BART-eligibility requirements.

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

17 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.
Chapter 3 – Panned Changes to the CAAPP Permit Through Reopening

CSAPR requires a total of 28 Eastern and Midwestern states to reduce annual SO\textsubscript{2} emissions, annual NO\textsubscript{x} emissions and/or ozone season NO\textsubscript{x} 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 SO\textsubscript{2} and annual NO\textsubscript{x}, and May 1, 2015 for ozone season NO\textsubscript{x}.

CSAPR includes several emissions trading programs that require affected electrical generating units (EGUs) to hold emission allowances sufficient to cover their emissions of NO\textsubscript{x} and/or SO\textsubscript{2} 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 SO\textsubscript{2} allocations for the two affected EGUs (combined) at Newton are 18,711 tons per year in 2015 and 2016 and 9,754 tons per year in 2017 through 2020. Annual NO\textsubscript{x} allocations for the two affected EGUs (combined) are 3,536 tons per year for the period of 2015 through 2020 and 1,431 tons per ozone season for the same year.\textsuperscript{18}

The requirements of CSAPR that apply to the two EGUs at Newton are addressed in Section 6.3 of the permit. The language in the draft permit is based on the regulatory requirements.

The Permittee submitted an initial compliance certification for CSAPR to USEPA on April 17, 2015. This has been followed by periodic compliance reports on a quarterly basis.

Section 6.4: Illinois Mercury Rule

To address mercury emissions from EGUs, Illinois adopted 35 IAC Part 225, “Control of Emissions from Large Combustion Sources”. This rule provided two options for certain plants, including Newton. One option only imposed stringent limits for mercury emissions; the other option deferred application of the mercury emission limits and, during the deferment, mandated implementation of specific mercury control technology in conjunction with more stringent limits for emissions of SO\textsubscript{2} and NO\textsubscript{x}.

For the EGUs at Newton, the Permittee chose the latter option, the “multi-pollutant standard” or MPS. Under this option, the two EGUs at Newton and the EGUs at other power plants in the MPS Group must comply with the following limits as would be addressed in planned Section 6.4 of the draft revised CAAPP permit:

- Mercury: 0.0080 lb mercury/GWh gross electrical output, as shown using continuous monitoring equipment which may include mercury sorbent traps and associated monitoring and data acquisition systems.

\textsuperscript{18} 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)
Chapter 3 – Panned Changes to the CAAPP Permit Through Reopening

- **NO\textsubscript{x}:** An MPS Group system-wide annual emission rate of no more than 0.11 lb/million Btu, as shown using continuous emissions monitoring systems.

- **SO\textsubscript{2}:** Pursuant to Board Case No. PCB 2014-010, an MPS Group system-wide annual emission rate of 0.35 lb/mmBtu, as shown using continuous emissions monitoring systems. In addition, the Permittee must continue to burn low sulfur coal at the Newton Power Station. The combined annual average stack SO\textsubscript{2} emissions of the Edwards, Joppa and Newton Power Stations must not exceed 0.55 lb/mmBtu on a calendar year annual average basis. Beginning January 1, 2020, a system-wide annual emission rate of 0.23 lb/mmBtu. Newton has also committed to constructing flue gas desulfurization units on both boilers, and must meet certain milestones during the construction process and submit annual reports documenting the progress of construction.

The Permittee initially complied with the rule in 2009 using the “alternative control technology” provisions of 35 IAC 225.233(c), which provided for compliance through operational monitoring of a sorbent injection system. The Permittee then began complying with the rule through the continuous emission monitoring (mercury sorbent trap monitoring system) provisions of 35 IAC 225.233(d) on February 1, 2013. The initial compliance certifications have been followed by periodic compliance certifications on a quarterly and annual basis.

Section 6.5: 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 UUUUU, to reduce emissions of hazardous air pollutants (HAPs) 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. Additionally, the USEPA has recently promulgated technical corrections to the MATS rule which have also been incorporated into this permit.

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 for certain HAPs, which

---

19 The MATS Rule is currently under review by the D.C. Circuit Court of Appeals. The USEPA proposed technical corrections to the MATS Rule on February 17, 2015, to correct and clarify certain text of the rule, with an effective date of April 6, 2016. Applicable corrections would be incorporated into the CAAPP permit. (See 81 FR 20172.)

Newton Power Station, ID No. 079808AAA, July 14, 2016
Statement of Basis for Planned Changes to CAAPP Permit No. 95090066
And Planned Issuance of a Revised Acid Rain Permit
a source may elect, including SO₂ (as an alternate to HCl), and PM (as an alternative to non-mercury HAP metals).

MATS also imposes a work practice to limit emissions of certain organic air toxics, including dioxin/furan, from existing and new coal- and oil-fired power plants. Because dioxins and furans form as a result of incomplete combustion, the work practice standards require a triennial or quadrennial combustion tune-up for each subject unit. The required tune-ups must include inspection, adjustment, and/or maintenance and repairs to ensure optimal combustion.

For the two coal boilers at Newton, the Permittee has chosen the following approaches to comply with requirements of the MATS Rule:

- **Non-Mercury HAP Metals:** Compliance with the total non-Hg HAP metals limit of 0.000050 lb/mmBtu, as a 30-boiler operating day rolling average. The Permittee is demonstrating compliance at the source with quarterly emissions testing and averaging across both boilers. (The Permittee has not chosen to use a continuous monitoring system at the source.) Pursuant to the MATS Rule, the source may qualify for low emitting EGU (LEE) status for total non-Hg HAP metals 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 Permittee will be required to conduct performance testing for total non-Hg HAP metals on each affected LEE-qualifying EGU once every three years.

- **Acid Gases:** Compliance with a Hydrogen Chloride limit of 0.0020 lb/mmBtu, as a 30-boiler operating day rolling average. With this option, quarterly testing for HCl emissions is required, and the units have the potential to qualify as LEE units 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 Permittee will be required to conduct performance testing for Hydrogen Chloride on each affected LEE-qualifying EGU once every three years.

- **Mercury:** Compliance with a limit of 0.011 lb/GWh, as a 90-boiler operating day rolling average, using emissions averaging including emissions from both boilers. Pursuant to the MATS Rule, the Permittee is using a mercury sorbent trap monitoring system 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 shall comply 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 UUUU 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 63.10042.20

---

20 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
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 compliance with the applicable emissions limits. The Permittee submitted notices of completion of initial performance tune-ups for the boilers to the Illinois EPA on July 23, 2015, for the June 4, 2015 Unit 1 tune-up, and September 2, 2015, for the August 17, 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 January 28, 2016.

MATS Compliance Options

The draft revised CAAPP 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.

Changes in Section 7.1: Coal Fired Boilers

Condition 7.1.1

The description of the boilers would be updated to reflect currently installed pollution control equipment and to remove the reference to boiler cleaning residue, which is not fired with coal in these boilers. Equipment installed on the boilers since 2005 includes activated carbon injection (ACI) systems. A note concerning the WFGD systems that are under construction would be added.

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 systems. A note concerning the WFGD systems for the boilers that are under construction would also be added.

Condition 7.1.4(i) through (k)

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

Condition 7.1.4(l)

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.”
New State Only requirements for fuel oil sulfur content if the boilers are burning liquid fuel exclusively would be added.

**Condition 7.1.5(b)(ii)(B)**

The \( \text{SO}_2 \) standards related to operation of the boilers while burning residual fuel oil or distillate fuel oil would be updated to include changes to 35 IAC Part 214 that are effective beginning on January 1, 2017. Since the changes have not yet been approved by USEPA as part of Illinois’ SIP, they would be listed in the permit as State-Only Requirements.

**Conditions 7.1.5(e), (f) and (j)**

Non-applicability statements for Compliance Assurance Monitoring for State Rule Requirements would be updated with cross-references, and CAM for the emission standards in the MATS rule would be added. Also, the non-applicability for \( \text{SO}_2 \) would more appropriately be listed as not required because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

**Conditions 7.1.5(g) through (i)**

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(e) and (k)**

Non-applicability statements for Compliance Assurance Monitoring (CAM) for State Rules for \( \text{SO}_2 \), \( \text{NO}_x \) and mercury based on use of continuous monitoring devices would be added to the permit. CAM is also not applicable for MATS standards.

**Condition 7.1.6(a)(iii)**

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 7.1.8(f)**

Construction permit requirements for the monitoring of sorbent injection 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.

**Condition 7.1.9(j)**

Construction permit requirements for recordkeeping for the sorbent injection system would be added and designated as [TIR] conditions because the original recordkeeping requirements in the construction permit would have expired when the permittee began complying by means of the emission standards for mercury under the Multi-Pollutant Standards, 35 IAC 225.233(d), which occurred in 2013.

**Condition 7.1.9(k)**

Recordkeeping requirements for liquid fuel sulfur content pursuant to new State-Only requirements would be added.

**Condition 7.1.10-1(a)(iv)**

Notification requirements for deviations from new State-Only liquid fuel sulfur content requirements would be added.

**Condition 7.1.11-2**

This condition would be added to address operation of the boilers with WFGD systems that are currently under construction as addressed by Construction Permit 10070051. The condition would add operating requirements, emissions testing requirements following startup of a WFGD system, and additional recordkeeping and notification requirements. With the addition of this condition, existing Condition 7.1.11 would be renumbered as Condition 7.1.11-1.

**Changes in Section 7.4: Gasoline Storage Tank**

**Condition 7.4.5(f)**

A non-applicability statement would be added for the NESHAP for Gasoline Dispensing Facilities, 40 CFR 63 Subpart CCCCCC. This is because Newton is a major source for HAPs and not an area source.

**Addition of Section 7.5: Limestone and Gypsum Handling Equipment**

This section would be added to the CAAPP permit due to the construction of equipment at Newton to handle the limestone and gypsum associated with the WFGD systems which are currently being constructed for the coal boilers. It is anticipated that the WFGDs and associated material handling equipment will begin operation in 2019.

The limestone handling system is used for unloading, storage and transfer of limestone. The Permittee will also operate a belt filter and conveyor to handle gypsum generated by the WFGD systems. Associated PM emissions will be controlled by various control measures such as enclosures and covers.
Chapter 3 - Panned Changes to the CAAPP Permit Through Reopening

**Condition 7.5.1**

A description of the limestone and gypsum handling equipment and associated control equipment would be added to the permit.

**Condition 7.5.2**

A table would be added listing emission units with description and identification of associated emission control equipment.

**Condition 7.5.3**

Applicability provisions, including when the provisions of Section 7.5 would become effective, would be added.

**Condition 7.5.4**

Applicable emission standards, including State rules for fugitive particulate matter and opacity of emissions, would be added.

**Condition 7.5.5**

Non-applicability statements for the NSPS for Nonmetallic Mineral Processing Plants and Compliance Assurance Monitoring provisions would be added.

**Condition 7.5.6**

Work practices, including control measures for particulate matter, construction permit emission limits and other control requirements, would be added.

**Condition 7.5.7**

Requirements for opacity observation for the affected processes would be added to the permit. Observations must be conducted within one year of startup of a boiler with a WFGD, and every third year thereafter.

**Condition 7.5.8**

Equipment inspections and visual emission observation requirements for the affected processes would be added to the permit. Reference Method 22 visual emission observations would be required during each calendar year. Equipment inspections would be required on a monthly basis.

**Condition 7.5.9**

Recordkeeping requirements, including records of process emission points, primary and secondary control measures for particulate matter, and the Record of Control Measures would be added. Also, construction permit requirements, records of inspections and observations, and records of incidents where proper control measures were not maintained would also be added.

**Condition 7.5.10**
Chapter 3 - Panned Changes to the CAAPP Permit Through Reopening

Reporting requirements, including reporting of deviations and quarterly reports would be added to the permit.

**Condition 7.5.11**

Operational flexibility, including operation of additional control measures, or replacement of control measures, would be added to the permit.

**Condition 7.5.12**

A summary of the compliance procedures for applicable emission standards and work practices would be added to the permit.
CHAPTER 4 - PLANNED CHANGES FOR THE COMPLIANCE ASSURANCE MONITORING (CAM) PLANS

4.1 CAM Monitoring Approach

The Permittee selected opacity as the indicator for the CAM Plans for PM emissions of the coal-fired boilers. The continuous opacity monitoring systems (COMS), which are installed in the stack for each boiler, are used to continuously monitor opacity. The indicator range for an excursion is opacity from a boiler greater than 20 percent, on a three-hour block average, excluding startup, shutdown or malfunction events.

Under the conditional approval of the submitted CAM plans, the Permittee was required to conduct testing for PM emissions to further evaluate the relationship between the opacity and the PM emissions of each boiler. The purpose of this testing was to confirm the selected indicator ranges and designated conditions in the CAM Plans for opacity are such that as long as the opacity is at or below the designated value, there is reasonable assurance that the boiler will comply with the applicable PM emission limits.

The PM testing was conducted during normal operation of the ESPs as well as during operation with detuned ESPs. The test results indicate that the PM emissions of the boilers at 20 percent opacity are less than 50 percent of the applicable state PM emission limits, i.e., 0.1 lb/mmBtu for each boiler.

4.2 CAM PM Testing

Emission testing was conducted for each boiler to further evaluate the relationship between opacity and PM emissions. The PM testing of Boiler 1 was conducted under three distinct operating conditions addressing the operation of the ESPs for the boilers: Normal ESP, De-tune Mid ESP and De-tune High ESP. The PM testing of Boiler 2 was conducted under two distinct operating conditions addressing the operation of the ESPs for the boilers: Normal ESP and De-tune High ESP.

The testing addressed boiler and control device operation under typical operating conditions and under conditions that simulated reduced effectiveness of the ESPs. During testing, the boilers operated in the maximum load range, since the highest PM emissions rates are associated with maximum load. Three test runs using USEPA Test Method 5 were conducted for each of the operating conditions of the boilers that were evaluated.

A summary of the test results for Boiler 1 is provided below. For all operating conditions, the PM emissions of Boiler 1 were less than 50 percent of the applicable PM emission standard pursuant to 35 IAC 212.203. In particular, the average PM emission rate with high de-tuning of the ESP (average opacity 19.6 percent) was 0.049 lb/mmBtu, compared to the applicable state standard of 0.1 lb/mmBtu.
Chapter 4 - Planned Changes for the Compliance Assurance Monitoring (CAM) Plans

<table>
<thead>
<tr>
<th>Operating Condition</th>
<th>PM Emissions (lb/mmBtu)</th>
<th>Opacity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>0.018</td>
<td>10.8</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.023</td>
<td>12.8</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.030</td>
<td>13.2</td>
</tr>
<tr>
<td>Baseline De-tune Mid</td>
<td>0.030</td>
<td>13.2</td>
</tr>
<tr>
<td>Baseline De-tune Mid</td>
<td>0.027</td>
<td>12.6</td>
</tr>
<tr>
<td>Baseline De-tune Mid</td>
<td>0.022</td>
<td>11.8</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.049</td>
<td>18.8</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.052</td>
<td>19.2</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.047</td>
<td>20.8</td>
</tr>
</tbody>
</table>

A summary of the test results for Boiler 2 is provided below. For all operating conditions, the PM emissions of Boiler 2 were less than 40 percent of the applicable PM standard. In particular, the average PM emission rate with the high de-tuning of the ESP (average opacity 16.3 percent) was 0.031 lb/mmBtu, compared to the applicable standard of 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>0.032</td>
<td>9.2</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.032</td>
<td>7.1</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.040</td>
<td>7.3</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.025</td>
<td>13.9</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.030</td>
<td>15.1</td>
</tr>
<tr>
<td>Baseline De-tune High</td>
<td>0.039</td>
<td>19.9</td>
</tr>
</tbody>
</table>

The analysis of the results of this testing convincingly demonstrate that the selected indicator ranges in the CAM Plans for the boilers meet 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.

### 4.4 CAM Excursion

During “normal operation”, (i.e., periods other than startup, shutdown or malfunction), an excursion for a boiler is a three-hour block during which the three-hour average opacity of that boiler exceeds 20 percent. Each excursion must be investigated by the Permittee to determine the monitoring status and operating conditions responsible for the excursion.
4.5 CAM Excursion Corrective Action

Upon detecting an excursion, Newton 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 records such as ESP voltages and currents 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 proposed draft version of the 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, clarification would be made that the CAM requirement is for the PM standard specified in Condition 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 212.204, as addressed in Condition 7.1.4(b)) until the conditionally approved CAM Plans 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 Plan 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 7.1.4(a)(iii) to
more specifically cite to the NSPS opacity limit addressed by Condition 7.1.9(c)(ii)(A).

**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 would be 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. Also, the reference to the CAM requirements in Table 7.1.13 would be corrected to reference Tables 7.1.13a and 7.1.13b.

**Condition 7.1.13-2(b)**

The recordkeeping requirement of this condition, which explains when recordkeeping pursuant to Condition 7.1.9(c)(ii)(B) was to be discontinued, would be removed and the condition would be left intentionally blank because Condition 7.1.9(c)(ii)(B) itself would now be removed from the permit.

**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.

**Tables 7.1.13a and 7.1.13b**

The values for the indicator ranges (20% Opacity) would be added to the tables. The tables would also be updated to reflect clarifying changes to the CAM Plans made by the Permittee, and remove the note concerning indicator values to be added pursuant to obsolete Condition 7.1.13-1(a). Also, the titles would be revised to correct the applicable regulatory provision.
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 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 and Condition 7.3.9(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 January 15, 2016.

Section 7.1: Coal-Fired Boilers

Condition 7.1.4(c) and conditions cross-referencing Condition 7.1.4(c)

This condition addressed State SO₂ limits (35 IAC 214.121(a)) that were invalidated by the Illinois Pollution Control Board, so would be removed and the condition would be left intentionally blank. Cross-references to this condition would be removed from Conditions 7.1.5(b)(ii), 7.1.8(b)(i), 7.1.9(d)(ii), 7.1.10-1(a)(ii), 7.1.10-2(b)(iii) and 7.1.12(c).

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.
Chapter 5 - Other Planned Revisions to the CAAPP Permit Through Significant Modification

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 (i.e., any fuel other than coal, fuel oil, or gas) burned during the quarter is greater than 3 percent by weight. This revision would more clearly articulate when testing is required.

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 of better 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.

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

Records for information required by 40 CFR Part 75 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.

Sections 7.2: Coal Handling Equipment

Condition 7.2.4(c) and 7.2.5(a)

Condition 7.2.4(c) would be added because the coal transfer conveyors, coal unloading by railcar, coal unloading by truck and coal storage bunkers 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 subject operations that are not subject to 35 IAC 212.321.

Condition 7.2.5(c)

---

22 For the coal-fired boilers, as addressed in Condition 7.1.11, non-standard fuels or fuel material includes used oil and alternative fuel materials that do not constitute waste and were not generated from either municipal waste or hazardous waste.
A non-applicability statement would be added since there are no emission units subject to the NSPS, 40 CFR 60 Subpart Y.

**Sections 7.3: Fly Ash Handling 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.
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 Newton 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 Newton Unit 1 and Newton 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 November 19, 2020, when the current CAAPP permit for Newton will expire. This will coordinate the term of the revised permit with the remaining term of the CAAPP permit for Newton, as is provided for by 40 CFR 72.73(b)(2). This will enable the renewal of the current CAAPP permit for the Newton 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 Newton to assist interested individuals in understanding the changes to the CAAPP permit that are now planned. All of the requirements described in this chapter are those that would be included in the draft permit.

7.1 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. NOX emissions from the boilers are controlled by combustion control measures including over fire air systems (OFA) and Low NOX Burners. Emissions of PM and non-mercury hazardous air pollutant (HAP) metals are controlled by electrostatic precipitators (ESP). SO2 emissions are controlled by the use of low sulfur coal. Mercury emissions are controlled with the combination of the electrostatic precipitator (ESP) on each affected boiler, and the use of the ACI systems.

The boilers are subject to emission standards for CO, NOX, PM (including non-mercury HAP metals), SO2, HCl and mercury and a standard for the opacity of emissions. In addition to State rules, the boilers are also subject to the NSPS for Fossil Fuel Fired Steam Generators, 40 CFR 60 Subpart D, which has limits for emissions of PM and SO2, and opacity of emissions. The boilers are also subject to the federal Acid Rain Program, which imposes requirements on SO2 and NOX emissions and requires that the boilers be equipped with continuous emissions monitoring systems (CEMS) for SO2 and NOX 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 Permittee to hold allowances for its actual annual SO2 emissions and annual and Ozone Season NOX emissions.

For the non-Hg HAP metals standards for the MATS Rule, the Permittee has elected to perform quarterly emissions testing for total non-Hg HAP metals to demonstrate compliance. Recent performance testing of the boilers (February 2016) showed compliance with the applicable limit (50 lb/MBtu) with a significant margin of compliance (i.e., 45.47% for Unit 1, and 47.2% for Unit 2).

For the Acid Gases provisions of the MATS Rule, the Permittee has elected to perform quarterly emissions testing for hydrogen chloride (HCl). Recent performance testing of the boilers (February 2016) showed compliance with the applicable limit (0.0020 lb/mmBtu) with a significant margin of compliance (i.e., 35.0% for Unit 1, and 40.0% for Unit 2).
Periodic testing for PM is required to verify compliance with the State and NSPS emission standard for PM (0.10 lb/mmBtu). 23 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. The most recent testing for PM and CO was conducted on the Newton boilers in February 2016. The PM emissions were 0.023 lb/mmBtu and 0.034 lb/mmBtu for Units 1 and 2, respectively, versus a standard of 0.10 lb/mmBtu. The CO emissions were 189 ppm and 182 ppm for Units 1 and 2, respectively, versus a standard of 200 ppm.

The boilers are subject to state and federal rules for mercury emissions which require continuous monitoring systems. The Permittee has elected to use sorbent trap monitoring systems to demonstrate compliance. The Permittee’s most recent annual report 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 12-month rolling emission rate averages for 2015 ranged between 0.0059 and 0.0061 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 Permittee 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 Permittee 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 Permittee’s startup procedures are not followed.

---

23 Testing for the State emission standards uses Reference Method 5, with a probe temperature of 248 ± 25°F.
For malfunction/breakdown events, records must be kept for each incident when operation of a boiler continued with excess opacity or 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, and, if so, an estimate of the magnitude of emissions of that pollutant or those pollutants during the incident. For certain exceedances, these records must also include a detailed explanation of why continued operation of the affected boiler was necessary, and 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. 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 SO\textsubscript{2} and NO\textsubscript{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 SO\textsubscript{2}, NO\textsubscript{x}, PM and opacity; and operational information for continuous monitoring systems.

### 7.2 Coal Handling Equipment

The Permittee handles, transfers, and stores coal in a series of operations at the source. The PM emissions from coal handling are subject to an opacity limit and regulations 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 would be included in the draft permit for limestone and gypsum handling operations. Newton must specify the control measures that it will implement for the source 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.\textsuperscript{24}

\textsuperscript{24} As required by the current CAAPP permit Newton submitted the Control Measures Record for coal handling and fly ash handling equipment at Newton to the Illinois EPA on January 15, 2016.
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 certain 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.

Opacity observations must be conducted on the coal and fly ash handling equipment at Newton within two years of condition effectiveness, which will be November 19, 2017. Newton has not yet submitted opacity observation results for the material handling operations. Opacity observations conducted at similar coal-fired power plants in Illinois with the same requirements as Newton show that those control measures provide a significant margin of compliance with the applicable opacity limits and ensure compliance with substantive requirements in the permits. Opacity observation results will be evaluated when received from the Permittee and if the control measures are found to be inadequate or have resulted in violations, there are several ways by which appropriate changes to the control measures may be initiated, including, but not limited to, enforcement actions or voluntary action by the Permittee.

7.3 Fly Ash Handling Equipment

The Permittee operates ash removal systems at the source that handle ash collected at the coal-fired boilers in a dry state. The PM emissions from the fly ash handling equipment are subject to an opacity limit and regulations that address stack and fugitive PM emissions.

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.

For the coal handling equipment other than coal receiving, the primary control measures are enclosures, chutes, structures, dust collectors, and coal pile maintenance and compaction. Secondary control measures include water mist curtains, chemical dust suppressant sprays, water sprays, or water wagon sprays when coal is unusually dry.

For the fly ash handling equipment, the primary control measures are enclosed piping, building enclosure, fly ash receiver/separator, dust collectors, moisture addition prior to loadout and an adjustable loadout snorkel. Secondary measures are not indicated.

Newton Power Station, ID No. 079808AAA, July 14, 2016
Statement of Basis for Planned Changes to CAAPP Permit No. 95090066
And Planned Issuance of a Revised Acid Rain Permit
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 certain malfunction/breakdown of equipment.

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.

Opacity observation results will be evaluated when received from the Permittee as discussed in 7.2 above.

7.4 Gasoline Storage Tank

The Permittee utilizes a small gasoline storage tank at the source for fueling of plant vehicles and equipment. 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.

7.5 Limestone and Gypsum Handling Equipment
(To be newly addressed by the revised CAAPP permit pursuant to the Reopening)

At a later date, the Permittee will operate a limestone handling system that is used for unloading, storage and transfer of limestone. The Permittee will also operate a belt filter and conveyor to handle gypsum generated by the WFGD systems. Associated PM emissions would be controlled by various control measures such as enclosures and covers. The limestone and gypsum systems are part of the Newton FGD Project which is currently under construction with an anticipated in service date of 2019. The requirements of this section of the permit will not become applicable until after the systems start operation.

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

Opacity observations of limestone and gypsum handling equipment will be required every three years.

The Permittee will be required to keep records of, among other things, the specific control measures required by the Control Measures Record that are used, operational data and required inspections.
Extended deviations from the identified control measures will be required to reported within 30 days. All deviations will be required to be addressed in quarterly reports that accompany the quarterly reports for the coal boilers.

7.6 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 Newton.

7.7 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

---

25 USEPA has issued a “SIP Call" that requires Illinois, as well as other states to, 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.
26 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).
27 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
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 standard during such periods. 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 Newton, 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 Newton, 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.

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.

Newton Power Station, ID No. 079808AAA, July 14, 2016
Statement of Basis for Planned Changes to CAAPP Permit No. 95090066
And Planned Issuance of a Revised Acid Rain Permit
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.

7.8 Incorporation by Reference

Based on USEPA guidance, as found in USEPA’s White Paper 2 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. 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

28 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.
29 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.
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.

7.9 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 Monitoring is addressed in Section 39.5(7) of the Act.\(^\text{30}\) Section 39.5(7)(b) of the Act\(^\text{31}\) 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.\(^\text{32}\). Monitoring requirements must also be established when standards and control

---

\(^{30}\) 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).

\(^{31}\) 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 period that is representative of the source’s compliance with the permit.

\(^{32}\) 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.
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, 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

---

33 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).
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.
Attachment 1 - Other Changes Planned by Minor Modification

Introduction

In parallel with this reopening proceeding and the modifications to the permit to fully approve the CAM Plan, 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

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.

Newton Power Station,
Statement of Basis for Reopening and Revision, June 6, 2016
ID No. 135823AAA, CAAPP Permit No. 9500009
Page 43
The emission units in the first column of the table would be updated to conform to changes in other parts of the permit. The title would be updated to remove the word “SIGNIFICANT” with the addition of the row for Insignificant Activities. A note indicating that the information and descriptions in the table are for informational purposes only would be added. Notes concerning the WFGD and New Limestone and Gypsum Handling Facilities that are under construction would also be added.

**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 clarity. Also, the note in Condition 5.2.2(b) would be removed and the opacity requirements for new combustion units would be added in new Condition 5.2.2(c) for clarity.

**Condition 5.5.1**

A parenthetical stating that the emission limitations for fees are a State-Only Requirement would be added to the condition for clarity.

**Changes in Section 6 of the Permit: Conditions for Emissions 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 7.1.1**

A clarifying statement that the Flue Gas Conditioning systems inject SO\(_3\) upstream of the ESPs would be added. The statement concerning the firing of used oil would also be clarified to state that it “may be” fired in the 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 requirements for written startup procedures in Conditions 7.1.3(b)(ii) would be updated to remove the phrase “at a minimum” for clarity and consistency.
Condition 7.1.4(a)(ii)

For clarity, the NSPS emission limitations for PM, SO$_2$ and NO$_X$ would be split up into individual conditions (Conditions 7.1.4(a)(ii)(A), (B) and (C)) for more detailed cross-references in other conditions in the permit. With this change, cross-references in Conditions 7.1.9(a)(ii), 7.1.9(d)(ii)(B), 7.1.9(e)(ii), 7.1.10-2(b)(iii), 7.1.10-2(c)(iii), 7.1.10-2(d)(iv), 7.1.12(b) and 7.1.12(c) would be updated. In addition, the condition would be revised to correct the description of the NSPS SO2 standard that is applicable to Newton Units 1 and 2.

Condition 7.1.4(b) and 7.1.5(b)(ii)(A)

The PM emissions limit was incorrectly stated as 0.10 lb/mmBtu. It would be corrected to state 0.1 lb/mmBtu as specified in 35 IAC 212.204.

Condition 7.1.4(g)

This condition would be revised to improve clarity and to conform to the phrasing used in Conditions 7.1.4(h) through (l).

Condition 7.1.4(h)

This condition would be added to reference the Acid Rain Program requirements set forth in Condition 6.2.

Condition 7.1.5(b)

The origin of authority would be added to this condition.

Condition 7.1.5(b)(ii)(A)

The standard for PM was incorrectly stated as 0.1 lb/mmBtu. The standard would be corrected to 0.10 lb/mmBtu.

Condition 7.1.5(f)

A cross-reference to the state requirement for CO would be added to the non-applicability statement for CAM.

Condition 7.1.6(a)(i)

The citation from 40 CFR 60 Subpart A would be corrected to match 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 reference to Condition 5.10 and effectiveness of the condition would be removed.
Condition 7.1.7(a)(iii)

The reference to the applicable PM limit of 0.10 lb/mmBtu would be corrected to reference the limit of 0.1 lb/mmBtu as set forth in 35 IAC 212.204.

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 CCC, 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 made in Condition 7.1.4(g) which cross-references Condition 5.2.2(c).

Condition 7.1.8(b)(i)

The use of the SO₂ CEMS to determine compliance with the NSPS limit in Condition 7.1.4(a)(ii)(B) would be added. It was incorrectly omitted in the current permit.

Condition 7.1.9(a)

The phrase “process waste” would be removed as discussed above.

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

The ambiguous phrases “at a minimum” and “as a minimum” would be removed.

Condition 7.1.9(c)(ii)

This condition would be updated to improve clarity that the opacity standard in Condition 5.2.2(c) is applicable to the affected boilers.

Condition 7.1.9(c)(ii)(A)

This condition would be updated to improve clarity and consistency.

Conditions 7.1.9(h)(ii)(D) through (F)

Cross-references would be added to improve clarity and consistency. The cross-referenced standards are in Condition 5.2.2(c) (opacity), Condition 7.1.4(b) (PM) and Condition 7.1.4(d) (CO).

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

This condition would be updated for clarity and consistency.
Condition 7.1.10-2(a)(iii)

The first two quarterly reports have already been submitted. Therefore, Condition 7.1.10-2(a)(iii)(B) is moot and would be removed. In addition, the cross-reference in Condition 7.1.10-2(a)(iii)(A) to Condition 7.1.10-2(a)(iii)(B) would be removed.

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(c)

In this condition, “process wastes” would no longer be mentioned since the Permittee would not be allowed to burn such materials and maintain the non-applicability to 40 CFR 63 Subpart CCC, as stated in Condition 7.1.5. Other clarifying edits, including concerning the types of materials classified as alternative fuels, would also be added to the condition.

Condition 7.1.12(a)

A reference to opacity in Condition 5.2.2(c) would be updated for clarity and consistency.

Tables 7.1.13a and 7.1.13b

The reference to the particulate matter standard (35 IAC 212.204) would be corrected in the titles to the tables.

Changes in Sections 7.2 and 7.3: Coal and Fly Ash Handling Equipment

Conditions 7.2.3(b) and 7.3.3(b)

These conditions would be updated for clarity and consistency of cross-referenced standards.

Conditions 7.2.4(a) and 7.3.4(a)

These conditions would be restructured to more clearly indicate that 35 IAC 212.301, the general state standard for fugitive particulate matter emissions as addressed in Condition 5.2.2(a), is applicable to the affected operations and processes.

Conditions 7.2.4(b) and 7.3.4(b)

These conditions would be restructured to more clearly indicate that 35 IAC 212.123, the general state standard for opacity, as addressed in Condition 5.2.2(b), is applicable to the affected operations and processes.
Attachment 1 - Other Changes by Minor Modification

Condition 7.2.6(b)

The annual PM limits for the affected operations would be corrected to total 112 tons/year. The individual PM emissions limits in Construction Permit 98080051 were correct; however the total was incorrectly stated as 102 tons/year. Condition 7.2.6(b)(iii) would be classified as a [TIR] condition with the change in total PM limits.

Also, the requirement in Condition 7.2.6(b)(iv) for the annual limit to be determined on a running total monthly basis would be clarified to accurately reflect the requirement as set forth in the construction permit. That requirement applies only to the limits set forth in Conditions 7.2.6(b)(i) and (ii), not to the limits in Condition 7.2.6(b)(iii).

Condition 7.2.8(a)

A [TIR] construction permit condition would be revised to be classified as a [T1] condition since it is not being revised in this permitting action. The [TIR] revision was made through a prior permitting action, effective November 19, 2015. Also, the origin of authority would be updated to specify the original construction permit 98080051.

Condition 7.3.6

The requirement for the annual limit to be determined on a running total monthly basis would be removed because the requirement was incorrectly attributed to the construction permit. The requirement would be removed to correct the condition.

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)).

Conditions 7.2.9(g) and 7.3.9(g)

An additional cross-reference would be added to clarify the records upon which the demonstration should be made.

Changes in Section 7.4: Gasoline Storage Tank

Condition 7.4.1 and 7.4.2

The conditions would be updated to reflect that the gasoline storage tank is a 1,000 gallon capacity tank with submerged loading pipe and that in addition to dispensing gasoline for plant vehicles it also dispenses gasoline for plant equipment. The reference to the submerged loading pipe would be removed from the column for emission control equipment/measures since it is a passive device. Also, the capacity would be removed from the table in Condition 7.4.2 and added to the description in Condition 7.4.1.
Condition 7.4.4(a)(i)

The condition would be updated to remove the reference to alternative compliance options and instead list the citation which details the different compliance options.

Condition 7.4.8

The date by which annual inspections of storage tank must be completed would be reworded for clarification.

Condition 7.4.9

Recordkeeping requirements would be updated for clarity and the ambiguous phrase “at a minimum” would be removed.

Changes in Section 9.0: Standard Permit Conditions

Condition 9.8

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

Changes in Section 10.0: Attachments

Conditions 10.1 and 10.2

Minor changes to the language in these conditions addressing 35 IAC 212.321 and 212.322 would be made to conform to the exact wording of these rules.
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. 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 Permittee 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 would be added to all pages of the permit. This change would be made for ease of navigation through the permit. The footer would 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 would be made to reduce confusion among the CAAPP permits for different facilities.

Deleted or Blank Conditions

Several obsolete conditions would be removed in their entirety from the permit. In order to reduce confusion from deleted condition numbers which 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.

Word or Phrase Changes throughout the Permit

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.
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 for consistency.

Changes in Section 1 of the Permit: Introduction

Condition 1.1


Condition 1.4

Newton would be referred to as the “Newton Power Station”, rather than the “Newton Energy Center”.

Change in Section 4 of the Permit: Emission Units

Condition 4.0

Updates to the table of emission units would be made to conform to changes made elsewhere in the permit.

Changes in Section 5: Overall Source Conditions

Condition 5.3

This condition, titled “General Non-Applicability of Regulations of Concern”, would be removed instead of listing “None”, and the condition would be left intentionally blank.

Condition 5.4

This condition, titled “Source-Wide Operational and Production Limits and Work Practices”, would be removed instead of indicating “None”, and would be left intentionally blank.

Condition 5.5.1
Attachment 2: Other Changes by Administrative Amendment

The phrase “State-Only Requirement” would be added to clarify that the condition reflects a State-Only requirement.

**Condition 5.8**

This condition, titled “General Operational Flexibility/Anticipated Operating Scenarios”, would be removed instead of listing “None”.

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

**Condition 7.1**

The title would be updated to remove the reference to the NSPS since the units are now also subject to NESHAP requirements

**Condition 7.1.4(a)(iv)**

Language in the condition would be reordered as it is in the NSPS.

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

The word “Condition” would be inserted to clarify the cross-reference to Condition 7.1.4(f)(i)(A).

**Condition 7.1.6**

The condition title would be revised to remove “Operational and Production Limits, and Emission Limitations” since there are no such requirements in the condition.

**Condition 7.1.13-2(f)**

A clarification would be made to a reference to the Illinois Environmental Protection Act.

**Changes in Section 7.4: Gasoline Storage Tank**

The title would be updated to reflect that the storage tank is a “gasoline storage tank”.

**Condition 7.4.12(a)**

The word “respectively” would be added for clarity.

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

**Condition 8.2**

This condition would be updated to clarify that “Section 6.2” is a reference to Section 6.2 of the CAAPP permit.

**Condition 8.6.4**

Newton Power Station,
Statement of Basis for Reopening and Revision, June 6, 2016
ID No. 135823AAA, CAAPP Permit No. 95090009
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.