



**SIERRA  
CLUB**  
FOUNDED 1892

March 6, 2015

2015 MAR -9 AM 10:59

OFFICE OF THE  
EXECUTIVE SECRETARIAT

**VIA HAND DELIVERY**

Regina McCarthy, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

**RE: Petition to Object to the Proposed Title V Operating Permit for Cayuga  
Operating Company's Cayuga Generating Station**

Dear Administrator McCarthy:

On Monday, December 15, 2014, the enclosed Petition to Object to the Proposed Title V Operating Permit for Cayuga Operating Company's Cayuga Generating Station on behalf of the Sierra Club and Earthjustice was delivered via hand delivery and accepted by your office. It has come to my attention that exhibits identified and referenced in the Petition were erroneously omitted from the package that was hand delivered to the Administrator on December 15, 2014. Enclosed please find a corrected submission that includes all referenced exhibits.

Thank you for your consideration.

Respectfully submitted,

Joshua Berman  
Sierra Club Environmental Law Program  
50 F St. NW, 8<sup>th</sup> Floor  
Washington, DC 20001  
Tel: (202) 650-6062  
Email: [Josh.Berman@sierraclub.org](mailto:Josh.Berman@sierraclub.org)

**BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

IN THE MATTER OF THE PROPOSED TITLE V	)	
OPERATING PERMIT FOR	)	
	)	
<b>CAYUGA OPERATING COMPANY, LLC</b>	)	PERMIT ID NO.
	)	7-5032-00019/00016
	)	
CAYUGA GENERATING STATION	)	
IN LANSING, NEW YORK	)	
	)	
ISSUED BY THE NEW YORK DEPARTMENT	)	
OF ENVIRONMENTAL CONSERVATION	)	
	)	

---

**PETITION TO OBJECT TO THE PROPOSED TITLE V OPERATING PERMIT FOR  
CAYUGA OPERATING COMPANY'S CAYUGA GENERATING STATION,  
ISSUED BY THE NEW YORK DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

Pursuant to Section 505 of the Clean Air Act ("Act"), the Sierra Club hereby respectfully petitions the U.S. Environmental Protection Agency ("EPA") to object to the proposed Title V operating permit ("Proposed Permit"<sup>1</sup>) issued by the New York Department of Environmental Conservation ("New York DEC") for Cayuga Operating Company LLC's Cayuga Generating Station coal-fired power plant ("the Plant") at 228 Cayuga Drive, Lansing, New York. The Proposed Permit fails to comply with at least two applicable requirements under the Act and, accordingly, objection by EPA is proper. Specifically: (1) the Proposed Permit authorizes the Plant to emit sulfur dioxide ("SO<sub>2</sub>"), an air contaminant, in quantities that contravene the 2010 1-hour SO<sub>2</sub> National Ambient Air Quality Standard ("NAAQS") in violation of New York's federally enforceable State Implementation Plan provision, 6 N.Y.C.R.R. § 200.6; and (2) the Proposed Permit fails to require sufficient monitoring of particulate matter to ensure compliance with the particulate matter limit in the permit. Accordingly, the EPA should object to the permit's issuance by New York DEC.

**I. LEGAL BACKGROUND**

**1. The Clean Air Act Title V Program**

All major stationary sources of air pollution are required to apply for operating permits under Title V of the Clean Air Act. *See* 42 U.S.C. § 7661a(a) ("[I]t shall be unlawful . . . to operate . . . a major source . . . except in compliance with a permit issued by a permitting

---

<sup>1</sup> A copy of the Proposed Permit is attached as Exhibit 1.

authority under this subchapter.”). Title V permits must provide for all federal and state regulations in one legally-enforceable document, thereby ensuring that all Clean Air Act requirements are applied to the facility and that the facility is in compliance with these requirements. *See id.* §§ 7661a(a) & 7661c(a); *see also* 40 C.F.R. § 70.6(a)(1).

The Act provides that permits issued under a Title V program “shall include enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan.” 42 U.S.C. § 7661c(a). In addition to emission limitations and standards, each Title V permit must contain sufficient monitoring, recordkeeping, reporting, and inspection and entry requirements to assure continuous compliance by sources with all existing applicable emission control requirements. *See* 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a)(1) & (a)(3).

Title V permits must contain all “those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.” 40 C.F.R. § 70.6(a)(1). Thus, the term “all applicable requirements” includes standards and/or requirements found in the State Implementation Plan (“SIP”). *See also id.* § 70.2(1) (defining “applicable requirements” to mean “[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA”). Indeed, EPA may not even approve a Title V permitting program unless it is persuaded that the permitting authority will “assure that upon issuance or renewal permits incorporate emissions limitations and other requirements in an applicable implementation plan.” 42 U.S.C. § 7661a(b)(5)(C).

## **2. Federal Regulation of Sulfur Dioxide**

The Clean Air Act is intended to protect air resources so as to promote the public health and welfare of the nation. *See id.* § 7401(b)(1). Pursuant to the Act, EPA is required to promulgate NAAQS for SO<sub>2</sub>, particulate matter, and other pollutants. *See id.* § 7409. Primary NAAQS must be set at a level adequate to protect public health, with an adequate margin of safety. *Id.* § 7409(b). Secondary NAAQS must be set at a level that is protective of the public welfare. *Id.* § 7409(b)(2). The NAAQS are then implemented through enforceable source-specific emission limitations and other air quality rules established by each state, which are designed to achieve the NAAQS. *Id.* § 7410(a). Such rules are collected into SIPs, which are subject to EPA approval.

In June 2010, EPA issued a new primary standard for SO<sub>2</sub>, recognizing that the prior 24-hour and annual SO<sub>2</sub> standards did not adequately protect the public against adverse respiratory effects associated with short term (5 minutes to 24 hours) exposure. 35 Fed. Reg. 35,520 (June 22, 2010) (hereinafter “Final Rule”). The new SO<sub>2</sub> NAAQS standard is a 1-hour standard set at 75 parts per billion (“ppb”), or 196 micrograms per cubic meter (“µg/m<sup>3</sup>”). 40 C.F.R. § 50.17(a). The standard was established in the form of the 99<sup>th</sup> percentile of the annual distribution of the daily maximum one-hour average concentrations. *Id.* at § 50.17(b).

Due to both the shorter averaging time and the numerical difference, the new one-hour SO<sub>2</sub> NAAQS is considerably more stringent than the prior SO<sub>2</sub> NAAQS. When setting the new

one-hour SO<sub>2</sub> NAAQS, EPA determined exposure to SO<sub>2</sub> in even very short time periods causes decrements in lung function, aggravation of asthma, and respiratory and cardiovascular morbidity. See U.S. EPA, *Integrated Science Assessment for Sulfur Oxides—Health Criteria* (2008); 75 Fed. Reg. at 35,525; see also U.S. EPA, *Our Nation's Air: Status and Trends Through 2008*, 4 (2010) (noting that the health effects of SO<sub>2</sub> exposure include aggravation of asthma, leading to wheezing, chest tightness, increased medication use, hospital admissions, and emergency room visits), available at <http://www.epa.gov/airtrends/2010/report/airpollution.pdf>. As such, the new, more stringent NAAQS is projected to have enormous benefits for public health. EPA has estimated that the new standard will prevent 2,300 - 5,900 premature deaths and 54,000 asthma attacks a year. U.S. EPA, *Final Regulatory Impact Analysis (RIA) for the SO<sub>2</sub> National Ambient Air Quality Standards (NAAQS)* tbl. 5.14 (2010), available at <http://www.epa.gov/ttnecas1/ria.html>. By contrast, levels of SO<sub>2</sub> air pollution above the standard in the NAAQS can be expected to cause thousands of premature deaths and tens of thousands of asthma attacks every year.

EPA is in the process of finalizing designations under the 2010 NAAQS. EPA has issued designations for areas in sixteen states for which air monitors registered exceedances of the 2010 1-hour SO<sub>2</sub> NAAQS based on monitored data from 2009-2011. See Air Quality Designations for the 2010 Sulfur Dioxide (SO<sub>2</sub>) Primary National Ambient Air Quality Standard; Final Rule, 78 Fed. Reg. 47,191 (Aug. 5, 2013). EPA is also in the process of resolving litigation that will establish a schedule for the remaining SO<sub>2</sub> designations. Pursuant to a proposed consent decree filed in the Northern District of California on June 2, 2014, EPA would designate the remaining areas of the country in three rounds beginning with designations for certain large SO<sub>2</sub> emitters within sixteen months of the date of the consent decree. See Proposed Consent Decree, Clean Air Act Citizen Suit; Notice of Proposed Consent Decree; Request for Public Comment, 79 Fed. Reg. 31,325 (June 2, 2014). A second round of designation would be made by December 31, 2017, and a final round of designations for states that have installed and have been collecting data from SO<sub>2</sub> monitoring networks meeting the requirements of EPA's Data Requirements Rule (proposed at 79 Fed. Reg. 27,449 (May 13, 2014)) would be finalized on or before December 31, 2020. *Id.*

### **3. New York Regulation to Ensure Maintenance of the National Ambient Air Quality Standards**

New York's federally enforceable State Implementation Plan provides that:

Notwithstanding the provisions of this Subchapter, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the commissioner shall specify the degree and/or method of emission control required.

6 N.Y.C.R.R. § 200.6 (emphasis added). Air pollution is defined under New York regulations as “[t]he presence in the outdoor atmosphere of one or more contaminants in quantities, of

characteristics and of a duration which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property.” 6 N.Y.C.R.R. § 200.1(g) (emphasis added). As a standard approved in the New York State Implementation Plan (“SIP”), 6 N.Y.C.R.R. § 200.6 constitutes an “emission standard or limitation” with which a Title V permit must assure compliance. *See* 40 C.F.R. § 52.1670(c); 40 C.F.R. §§ 70.6(a)(1), 70.2; 6 N.Y.C.R.R. §§ 201-6.4(a)(1), 201-2.1(b)(5)(i).

## II. FACTUAL BACKGROUND

Cayuga Generating Station is a coal-fired electric generating facility that began operation in 1955. The Plant consists of two coal-fired boilers, with a combined capacity of 312.7 megawatts (“MW”) net capacity (winter). In 2013, the facility emitted 2,654.8 tons of SO<sub>2</sub>, 1,403.5 tons of nitrogen oxides (“NO<sub>x</sub>”), and 907,301.1 tons of carbon dioxide (“CO<sub>2</sub>”) equivalents.<sup>2</sup> In 2010, the Plant emitted 643.7 tons of particulates and 201.1 tons of PM<sub>10</sub>.<sup>3</sup>

Unit 1 is a combustion engineering dry bottom, tangentially fired boiler rated at 1,484 million British Thermal Units per hour (“MMBtu/hr”) maximum heat input. Unit 1’s boiler burns bituminous coal as its primary fuel and No. 2 fuel oil or diesel fuel for startup and flame stabilization. Unit 1 primarily exhausts through its own stack, but also has the capability to emit through Unit 2’s stack, as well as through a bypass stack. Unit 2 is a combustion engineering dry bottom, tangentially fired boiler rated at 1,517 MMBtu/hr maximum heat input. Unit 2’s boiler burns bituminous coal as its primary fuel and No. 2 fuel oil or diesel fuel for startup and flame stabilization. Unit 2 primarily emits through its own stack, but also has the capability to emit through Unit 1’s stack, as well as through a bypass stack.

The particulate matter (“PM”) emissions from Units 1 and 2 are mitigated in part by the use of electrostatic precipitation and/or wet flue gas desulfurization (“FGD”) and measured at the “stack currently in use by [each unit].” Proposed Permit at 66, Item 72.1 & 67, Item 72.3. SO<sub>2</sub> emissions are limited by an FGD system that has a module for each boiler with each module having its own stack. The FGD system is designed so that emissions from either stack can be treated by either FGD module. However, there also is a bypass stack, the authorized use of which remains unclear in light of apparently conflicting authorizations in the Proposed Permit.<sup>4</sup> NO<sub>x</sub> emissions are limited through the use of Level III Low NO<sub>x</sub> Concentric Firing System

<sup>2</sup> *See* EPA Air Markets Program Database, <http://ampd.epa.gov/ampd/>.

<sup>3</sup> *See* <http://www.dec.ny.gov/chemical/79178.html>. 2010 is the last year for which emissions inventory data is available on the DEC website.

<sup>4</sup> Whereas the May 7, 2014 draft permit provided that the bypass stack can be used “during a boiler startup, shutdown, and in the case of an FGD module problem, *see* May 7, 2014 Draft Permit at 21, and the Proposed Permit retains this language at page 19, DEC has also added language to the Proposed Permit providing that “Combustion gases may not flow through the by-pass stack except during emergency periods if the health and safety of personnel is jeopardized or during an unavoidable malfunction” and “Fuel flow to the boiler shall cease as soon as possible once flue gases start to flow through the by-pass stack.” *See* Proposed Permit at 20, Item 21.1. Retention of the language authorizing use of the by-pass stack during periods of startup and shutdown appears to be an oversight by DEC, which in its Response to Comments stated that it “does not need to include a clear definition of startup or shutdown because the revised permit language prohibits the exhausting of combustion gases through the bypass stack during all periods except during emergency periods or during an unavoidable malfunction.” Resp. to Cmts. at 4. Nevertheless, the Proposed Permit presently contains two conflicting authorizations for the by-pass stack.

("LNCFS-III") and good combustion practices. Unit 1 additionally contains a selective catalytic reduction ("SCR") unit. The Proposed Permit also states that "nitrogen oxides are limited on a system-wide basis as established in the Cayuga and Somerset NO<sub>x</sub> RACT Compliance Plan." *Id.* at 66, Item 72.1 & 67, Item 72.3.<sup>5</sup>

### III. PROCEDURAL BACKGROUND

The Plant is currently operating under a Title V operating permit that was issued on October 15, 2008 and expired on October 14, 2013. In April 2013, the Sierra Club commissioned Steven Klafka, P.E., of Wingra Engineering to model the air quality impacts associated with allowable and maximum actual SO<sub>2</sub> emissions from the Plant. Mr. Klafka conducted his air dispersion modeling in adherence with all available U.S. EPA guidance for evaluating source impacts on attainment of the 1-hour SO<sub>2</sub> NAAQS via aerial dispersion modeling and based on conservative assumptions likely to underestimate total SO<sub>2</sub> concentrations. Mr. Klafka's modeling identified significant exceedances of EPA's 2010 1-hour SO<sub>2</sub> NAAQS using steady-state modeling based on both allowable and maximum actual SO<sub>2</sub> emissions. The modeling was submitted to New York DEC on June 13, 2013 as an exhibit to Sierra Club's comments concerning New York's Section 110(a) Infrastructure State Implementation Plan Submittal for the 2010 SO<sub>2</sub> NAAQS.

On May 7, 2014, New York DEC released for public comment a draft Title V permit renewal and permit review report for the Plant. After confirming that the SO<sub>2</sub> emission rates authorized by the draft Title V permit were identical to those included in the October 2008 Title V permit, which were previously modeled by Mr. Klafka, the Sierra Club commissioned Mr. Klafka to supplement his 2013 modeling report to include air quality impacts when the Plant was emitting through the bypass stack. Mr. Klafka's June 4, 2014 supplemented modeling report was submitted to New York DEC as an exhibit to Sierra Club's Title V comments. *See* Sierra Club Evaluation of Compliance with 1-hour SO<sub>2</sub> NAAQS; Cayuga Operating Company; Lansing, New York (Supplemented on June 4, 2014) (hereinafter "SO<sub>2</sub> Modeling Report"). A copy of Mr. Klafka's supplemented modeling report is attached as Exhibit 2.

The comment period on the draft permit for the Plant was initially 30 days but was subsequently extended to July 7, 2014. On July 7, 2014, Earthjustice timely submitted comments to New York DEC on behalf of Sierra Club regarding the draft Title V permit. Among other issues, the comments identified that the draft permit failed to prevent violations of

---

<sup>5</sup> On July 20, 2012, the Cayuga Operating Company, LLC submitted a notification to the New York Public Service Commission ("PSC") of its intent to mothball Units 1 and 2 by January 16, 2013. While the mothballing or retirement of the Plant would have some impacts on the reliability of the transmission grid, transmission reinforcements have been identified that would allow for the least-cost and expeditious retirement of the Plant. The PSC, however, directed New York State Electric and Gas ("NYSEG") and the Cayuga Operating Company to submit a proposal by October 24, 2013 to repower the Plant with natural gas. After numerous joint requests to extend this deadline, Cayuga Operating Company and NYSEG recently requested and received an extension until February 6, 2015, to submit separate proposals to address long-term reliability. In the meantime, the PSC approved a reliability support services agreement ("RSSA") that requires ratepayers to subsidize the continued operation of the uneconomic coal Plant until at least June 30, 2017. The current RSSA, which is subject of litigation by Sierra Club and others, includes provisions to pass along the costs of certain capital expenditures to the ratepayers.

the 1-hour SO<sub>2</sub> NAAQS in violation of New York's federally enforceable SIP. The comments also identified the need for DEC to include more stringent monitoring requirements to assure compliance with the particulate matter limits in the permit. A copy of Sierra Club's July 7, 2014 comments is attached as Exhibit 3.

#### IV. GROUNDS FOR OBJECTION TO NEW YORK DEC'S PROPOSED PERMIT

The Sierra Club petitions EPA to object to the Cayuga Title V permit on two distinct grounds. First, the permit fails to include emission limits for SO<sub>2</sub> that are sufficient to ensure that the Plant does not contravene the 2010 1-hour SO<sub>2</sub> NAAQS. Second, the permit fails to require sufficient monitoring of particulate matter to ensure compliance with the particulate matter limit in the permit.

##### **1. EPA Should Object to DEC's Proposed Title V Permit Because the Permit Fails to Contain Emission Limits for SO<sub>2</sub> Sufficient to Ensure that the Plant Does Not Contravene the 1-hour SO<sub>2</sub> NAAQS, as Required by 6 N.Y.C.R.R. § 200.6.**

New York's federally enforceable SIP expressly enjoins any air contamination source from emitting air contaminants "in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution." 6 N.Y.C.R.R. § 200.6. The SO<sub>2</sub> Modeling Report commissioned by the Sierra Club and authored by Steven Klafka demonstrates that the limits in the Proposed Permit are insufficiently stringent to ensure that the facility does not contravene the 2010 1-hour SO<sub>2</sub> NAAQS. Mr. Klafka's modeling was conducted in adherence with all available U.S. EPA guidance for evaluating source impacts on attainment of the 1-hour SO<sub>2</sub> NAAQS via aerial dispersion modeling<sup>6</sup> and is based on conservative assumptions likely to underestimate total SO<sub>2</sub> concentrations.

The modeling results indicate that emissions through the main stacks at permitted levels are predicted to cause peak impacts of 10,927.0 µg/m<sup>3</sup>—or more than 55 times higher than the 1-hour SO<sub>2</sub> NAAQS. SO<sub>2</sub> Modeling Report at 3. Using maximum measured actual emissions through the main stacks, the modeling predicted a peak impact of 8,297.8 µg/m<sup>3</sup>. *Id.* Emissions through the bypass stack at permitted levels are predicted to cause peak impacts of 5,141.8

---

<sup>6</sup> In its final rule establishing the 1-hour SO<sub>2</sub> standard, U.S. EPA recognized the "strong source-oriented nature of SO<sub>2</sub> ambient impacts," 75 Fed. Reg. at 35,570, and concluded that the appropriate methodology for purposes of determining compliance, attainment, and nonattainment with the new NAAQS is modeling. *See* 75 Fed. Reg. at 35,551 (describing dispersion modeling as "the most technically appropriate, efficient, and readily available method for assessing short-term ambient SO<sub>2</sub> concentrations in areas with large point sources."). Similarly, U.S. EPA explained in its White Paper regarding the 1-hour SO<sub>2</sub> NAAQS that use of modeling to determine attainment for the SO<sub>2</sub> standard "could better address several potentially problematic issues than would the narrower monitoring-focused approach discussed in the proposal for the SO<sub>2</sub> NAAQS, including the unique source-specific impacts of SO<sub>2</sub> emissions and the special challenges SO<sub>2</sub> emissions have historically presented in terms of monitoring short-term SO<sub>2</sub> levels for comparison with the NAAQS in many situations (75 FR 35550)." EPA White Paper at 3-4, available at <http://www.epa.gov/airquality/sulfurdioxide/pdfs/20120522whitepaper.pdf>; *see also Montana Sulphur & Chemical Co. v. U.S. EPA*, 666 F.3d 1174 (9th Cir. 2012) (affirming use of modeling to ascertain SO<sub>2</sub> pollution impacts); U.S. EPA, Final Response to Petition From New Jersey Regarding SO<sub>2</sub> Emissions From the Portland Generating Station, 76 Fed. Reg. 69,052 (Nov. 7, 2011) (using modeling to set emission limits sufficient to prevent air pollution).

µg/m<sup>3</sup>. *Id.*

#### Modeled 1-Hour SO<sub>2</sub> Results for the Plant

Emissions	Stacks	Highest Projected Concen. (µg/m <sup>3</sup> )	Background Concen. (µg/m <sup>3</sup> )	Total Concen. (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	NAAQS Exceeded?
Allowable <sup>7</sup>	1 & 2 <sup>8</sup>	10,913.9	13.1	10,927.0	196.2	YES
Maximum <sup>9</sup>	1 & 2	8,284.7	13.1	8,297.8	196.2	YES
Allowable	Bypass Stack	5,128.7	13.1	5,141.8	196.2	YES

Predicted exceedances of the 1-hour SO<sub>2</sub> NAAQS extend throughout the region surrounding the Plant to a maximum distance of 50 km. *Id.* at 4.

The Proposed Permit currently limits the emission of SO<sub>2</sub> to 5.0 lb/MMBtu from each emission point,<sup>10</sup> based on a 24-hour block average. Proposed Permit at 22, Item 24.2.<sup>11</sup> As demonstrated by the SO<sub>2</sub> Modeling Report, it is necessary to reduce such allowable emissions through the main stacks by 98.3% in order to ensure compliance with the 1-hour SO<sub>2</sub> NAAQS. SO<sub>2</sub> Modeling Report at 4. In other words, to ensure compliance with the 1-hour SO<sub>2</sub> NAAQS—and consequently with 6 N.Y.C.R.R. §§ 200.6—the Plant's Title V permit must contain an SO<sub>2</sub> emission limit applicable to Stacks 1 & 2 that is at least as restrictive as 251.7 lb/hr (or 0.08 lb/MMBtu) as measured using a 1-hour averaging period. *Id.* Likewise, to the extent emissions are authorized from the bypass stack, allowable emissions from this stack must be reduced by

<sup>7</sup> Allowable emissions are the maximum emissions the Plant could emit based on the emissions limits in the Proposed Permit.

<sup>8</sup> Unit 1 primarily exhausts through Stack 1 (Emission Point NEW01), but has the capability of also exhausting through both Stack 2 (Emission Point NEW02) and the bypass stack (Emission Point NEW03). Proposed Permit at 19, Item 21.1. Similarly, Unit 2 primarily exhausts through Stack 2, but has the capability of also exhausting through Stack 1 and the bypass stack. *Id.*

<sup>9</sup> Maximum emissions were determined using the highest combined emission rate from all Plant units during a single hour as measured during 2011 and compiled by U.S. EPA through its "Clean Air Markets" database, available at <http://ampd.epa.gov/ampd/>.

<sup>10</sup> Conditions 24-26 limit plant SO<sub>2</sub> emissions and apply to Emission Unit M-00001, Emission Source B0001 (Boiler 1), Process P11 (burning bituminous coal) and Emission Unit M-00001, Emission Source B0002 (Boiler 2), Process P21 (burning bituminous coal). Proposed Permit at 22-25. Because each of the main boilers is capable of exhausting through any of the three stacks, *see supra* note 8, these three permit Conditions—as well as the emissions limitations, monitoring, and reporting requirements therein—apply to both the main stacks and the bypass stack. Proposed Permit at 22-25. This interpretation is confirmed by each Condition's express limitation of emissions "from each emission point." *Id.* The Proposed Permit refers to the three stacks separately as Emission Points NEW01, NEW02, and NEW03. *See supra* note 8.

<sup>11</sup> The Proposed Permit also contains SO<sub>2</sub> emission limits of 3.8 lb/MMBtu measured on a 3-month rolling average, and 3.4 lb/MMBtu measured on an annual rolling average. *See* Proposed Permit at 23-25. Given their longer averaging times, these limits would similarly allow for exceedances of the 1-hour SO<sub>2</sub> NAAQS. And effective April 16, 2015, the Proposed Permit incorporates a limit of 0.20 lb/MMBtu SO<sub>2</sub> for each boiler to comply with the federal Mercury and Air Toxics Standard. Proposed Permit at 54, Item 59.2(3). This limit is likewise a long-term limit (with an averaging time of 30 boiler operating days), and, as the table below shows, even as a 1-hour limit 0.20 lb/MMBtu would be insufficient to prevent exceedances of the NAAQS.



96.4%, necessitating an SO<sub>2</sub> emissions limit that is at least as restrictive as 535.7 lb/hr (or 0.17 lb/MMBtu) as measured using a 1-hour averaging period. *Id.*

#### Emission Reductions Necessary for Compliance with the 1-Hour SO<sub>2</sub> NAAQS

Stacks	Acceptable Impact (NAAQS – Background) 99 <sup>th</sup> Percentile 1-Hour Daily Max (µg/m <sup>3</sup> )	Required Reduction Based on Allowable Emissions (%)	Required Emission Rate (lb/hr)	Required 1-Hour Average Emission Rate (lb/MMBtu)
1 & 2	183.1	98.3%	251.7	0.08
Bypass Stack	183.1	96.4%	535.7	0.17

In view of the air dispersion modeling submitted to New York DEC demonstrating that both allowable and maximum actual emissions from the Plant cause exceedances of the 1-hour SO<sub>2</sub> NAAQS, EPA should object to the Proposed Permit and require New York DEC to amend the Title V permit to include the SO<sub>2</sub> limits needed to ensure that emissions from the Plant do not cause or contribute to exceedances of the 1-hour SO<sub>2</sub> NAAQS. Such result is required by New York's federally-enforceable SIP, which prohibits any air emission source from contravening a NAAQS and, moreover, provides that "[i]n such cases where contravention occurs or may occur, the commissioner shall specify the degree and/or method of emission control required." 6 N.Y.C.R.R. § 200.6 (emphasis added). New York's SIP legally forecloses DEC from authorizing SO<sub>2</sub> emissions from Cayuga at a rate of 5.0 lb/MMBtu where modeling demonstrates that this rate would result in contravention of the 1-hour SO<sub>2</sub> NAAQS. Instead, the agency has a mandatory duty to establish an emission limit necessary to avoid exceedances of the NAAQS and to incorporate these limits into the facility's Title V permit. Here, based on the air dispersion modeling conducted by Mr. Klafka, the Title V permit must be revised to include an SO<sub>2</sub> emission limit of 0.08 lb/MMBtu and/or 251.7 lb/hr for the main stacks and 0.17 lb/MMBtu and/or 535.7 lb/hr for the bypass stack.

These revised limits must necessarily be based on a 1-hour average or achieve equivalent stringency.<sup>12</sup> The emission limits in the Proposed Permit, in addition to being too lax in emission rate, are too lax in averaging time to ensure compliance with the 1-hour SO<sub>2</sub> NAAQS. Compliance with a 24-hour or longer average alone would still permit several violations of the 1-hour SO<sub>2</sub> NAAQS each day so long as those hours of violation were balanced out with a few hours of operation below emission limits. This would contravene the very basis for U.S. EPA's

<sup>12</sup> Although EPA's NSIP Guidance purports to authorize consideration of averaging times longer than 1 hour, the NSIP Guidance also makes clear that "EPA recommends limiting the use of this approach to only those instances where a source's normal emissions variability would result in 1-hour limits being extremely difficult to achieve in practice." NSIP Guidance at 27. Moreover, EPA makes clear that "in order to provide adequate assurance that the NAAQS will be met, the EPA believes that any emissions limits based on averaging periods longer than 1 hour should be designed to have comparable stringency to a 1-hour average limit at the critical emission value." *Id.* at 24. While Sierra Club believes that only a 1-hour limit will ensure Cayuga's compliance with the 1-hour SO<sub>2</sub> NAAQS and that it would not be "extremely difficult" for the Cayuga plant to comply with a 1-hour limit, any limit with a longer than 1-hour averaging time would have to, at a minimum, be more stringent than the limits identified in Mr. Klafka's report in order to have any chance of preventing Cayuga's emissions from contravening the 1-hour SO<sub>2</sub> NAAQS.

promulgation of a new 1-hour SO<sub>2</sub> standard—its recognition that there is a causal relationship between respiratory morbidity and short-term (5-minutes to 24-hours) exposure to SO<sub>2</sub> and acknowledgment that even 5-minute peaks can result in adverse respiratory effects. *See* 75 Fed. Reg. at 35,524-25. Given the demonstrated negative effects of even short-term exposure to elevated SO<sub>2</sub> levels, compliance with SO<sub>2</sub> limits on at least an hourly basis is necessary to avoid conditions of air pollution injurious to human health. *See* 6 N.Y.C.R.R. §§ 200.6, 211.1; *see also In re: Mississippi Lime Co.*, 2011 WL 3557194, at \*26-27 (U.S. EAB Aug. 9, 2011) (holding that SO<sub>2</sub> emission limits should be based on hourly averaging times and rejecting an agency's attempt to use a 3-hour averaging time because "emission limits should be based on concentration estimates for the averaging time that results in the most stringent control requirements. 40 C.F.R. pt. 51, app. W, § 10.2.3.1.a.")).

In its Response to Comments,<sup>13</sup> New York DEC does not dispute that the Plant's permitted emissions cause exceedances of the 1-hour SO<sub>2</sub> NAAQS or question the validity of the air quality modeling submitted by Sierra Club. DEC also does not challenge the fact that 6 N.Y.C.R.R. § 200.6 constitutes an applicable "emission standard or limitation" with which a Title V permit must assure compliance. Instead, the agency proffers three purported justifications for its failure to modify the Title V permit to ensure SO<sub>2</sub> NAAQS compliance. None, however, withstands scrutiny.

First, New York DEC notes that EPA has yet to publish a final Data Requirements Rule for the 1-Hour SO<sub>2</sub> NAAQS, which, according to New York DEC, "is necessary for the state to comply with the NAAQS." Resp. to Cmts. at 1. New York DEC adds that EPA has "failed to make area designations for the NAAQS in New York State and the rest of the country." *Id.* As an initial matter, DEC is mistaken regarding the EPA SO<sub>2</sub> designation process. EPA has already designated 29 areas in 16 states "nonattainment," and states with designated nonattainment areas are currently at work developing nonattainment SIPs, which are due to EPA on April 4, 2015. Moreover, New York is by no means without guidance in how to establish source-specific limits designed to ensure attainment and maintenance of the NAAQS. Most pertinently, on April 23, 2014, EPA authored a memorandum designed to provide guidance to states and tribes tasked with submitting nonattainment SIPs for the 2010 SO<sub>2</sub> NAAQS. *See* Memorandum from Steven Page to Regional Air Division Directors, Regions 1-10: Guidance for 1-Hour SO<sub>2</sub> Nonattainment Area SIP Submissions (Apr. 23, 2014) [hereinafter "NSIP Guidance"].<sup>14</sup> The NSIP Guidance instructs states on how to identify "critical emission values"—the hourly emission rate that modeling predicts would result in ambient impacts at the level of the NAAQS—for facilities that are contributing to nonattainment and provides extensive guidance on how to translate this critical emission value into an enforceable emission limit. *See* NSIP Guidance at 22-36 and Appendix B; *accord* SO<sub>2</sub> Guideline Document, U.S. EPA, Office of Air Quality Planning and Standards, EPA-452/R-94-008 (Feb. 1994), at 6-14 to 6-16, available at <http://www.epa.gov/ttn/oarpg/t1pgm.html>. In addition, Appendix A of the NSIP Guidance contains detailed modeling guidance for nonattainment areas, supplementing a long line of SO<sub>2</sub> modeling guidance documents from EPA including EPA's 40 C.F.R. Part 51 Appendix W regulations, EPA's September 22, 2011 Guidance for 1-Hour SO<sub>2</sub> NAAQS SIP Submissions, and EPA's draft December 2013 SO<sub>2</sub> NAAQS Designations Modeling Technical Assistance

<sup>13</sup> A copy of New York DEC's Response to Comments is attached as Exhibit 4.

<sup>14</sup> A copy of EPA's NSIP Guidance is attached as Exhibit 5.

Document. These guidance documents provide ample instruction on how to develop modeling-informed source-specific emission limits that are sufficient to protect against contravention of the 2010 1-hour SO<sub>2</sub> NAAQS.

In addition, there are a number of examples of short-term modeling-informed emission limits that have been developed and incorporated into Title V permits. The most recent Title V permit for the Homer City plant in Homer City, Pennsylvania, for instance, includes modeling-informed 1-hour SO<sub>2</sub> emission limits designed to prevent exceedances of the 2010 1-hour SO<sub>2</sub> NAAQS. *See* PaDEP Plan Approval for Homer City Generation LP (revised and effective May 14, 2013), at 10, attached as Exhibit 6. Likewise, a number of Title V permits in Minnesota include 1-hour SO<sub>2</sub> emission limits designed to protect against exceedances of the NAAQS. *See, e.g.,* Air Emission Permit No. 16300005-012 issued to Xcel Energy – Allen S. King Generating (June 20, 2013), at 33, attached as Exhibit 7; Air Emission Permit No. 03700003-011 issued to Xcel Energy – Black Dog (Apr. 1, 2014), at 253, attached as Exhibit 8; Air Emission Permit No. 14100004-004 issued to Xcel Energy – Sherburne Generating Plant (Jan. 29, 2013), at 22, attached as Exhibit 9.<sup>15</sup>

Second, New York DEC asserts that it is “impossible” for DEC to submit an attainment SIP demonstrating NAAQS compliance until the 2010 SO<sub>2</sub> NAAQS implementation process has been completed. *Resp. to Cmts.* at 1. Regardless of whether this assertion is correct, it misses the mark. Finalizing a Title V permit for the Plant that complies with DEC’s obligations under 6 N.Y.C.R.R. § 200.6 to “specify the degree and/or method of emission control required” to ensure that the Plant does not contravene the 1-hour SO<sub>2</sub> NAAQS does not reference or depend upon New York’s submission of a complete attainment SIP for the 2010 NAAQS. Nor should it. As discussed above, DEC has ample guidance and available tools to establish the necessary emission limits for the Plant at this time. And any source-specific emission limits developed in compliance with 6 N.Y.C.R.R. § 200.6 can be readily incorporated into New York’s subsequent attainment SIP at whatever point it is completed, if any such SIP is needed in the future.<sup>16</sup> There is no legal or factual basis for concluding that a complete attainment SIP must precede establishment of NAAQS-protective emission limits for the Plant.

Third, New York DEC contends that “other control programs will reduce the SO<sub>2</sub>

---

<sup>15</sup> In addition, accompanying an October 6, 2014 letter to New York DEC regarding the Title V permit application for the Greenidge power plant in Dresden, NY, the Sierra Club provided a copy of a presentation made by the Maryland Department of the Environment (“MDE”) in which MDE described how it was planning on establishing unit-specific modeling-informed SO<sub>2</sub> emission limits to ensure that the ambient impacts of each of the coal units in the state does not exceed the 2010 1-hour SO<sub>2</sub> NAAQS, as well as the draft regulation embodying those limits, which MDE is in the process of finalizing. A copy of the letter and attachments are provided as Exhibits 10a-10c. The Sierra Club noted that New York could employ a similar methodology to that used by MDE to derive appropriate and NAAQS-protective SO<sub>2</sub> emission limits for the Greenidge facility, and a similar approach could likewise be used here to derive appropriate SO<sub>2</sub> limits for Cayuga. The October 6, 2014 letter was provided to a wide range of DEC employees including Jared Snyder, Assistant Commissioner, Air Resource, Climate Change and Energy, Edward McTiernan, Deputy Commissioner and General Counsel, Steven Flint, Assistant Director, Division of Air Resources, Chris Hogan, Division of Environmental Permits, Scott Sheeley, Regional Permit Administrator, Region 8, and Dennis Harkawik, Regional Attorney, Region 8.

<sup>16</sup> In fact, by complying with its legal duty to ensure that the Plant’s emissions do not contravene the 1-hour SO<sub>2</sub> NAAQS, DEC could end up avoiding a 1-hour SO<sub>2</sub> NAAQS non-attainment designation for the area and, therefore, avoid a future need to develop such an attainment SIP.

ambient impacts from utilities long before the 2010 NAAQS process is finalized.” DEC Resp. to Cmts. at 1. Specifically, New York DEC points to EPA’s Mercury and Air Toxics Standard (“MATS”), which New York DEC asserts would require control of SO<sub>2</sub> by April 2015. *Id.* New York DEC’s reliance on MATS is misplaced for a number of reasons. First, to the extent that the Proposed Permit requires control of SO<sub>2</sub> as a proxy for the acid gas hazardous air pollutants directly regulated under MATS, it does not follow that the resulting limitations are an appropriate or adequate substitute for emission limits directly calibrated to address compliance with the 1-hour SO<sub>2</sub> NAAQS. For one thing, the Proposed Permit authorizes Cayuga Operating Company to comply with MATS using a “system average” by providing an emissions averaging plan by December 16, 2014. Proposed Permit at 54, Item 59.2(5). However, as the SO<sub>2</sub> air dispersion modeling report demonstrates, SO<sub>2</sub> NAAQS compliance is a location-sensitive issue with areas of noncompliance localized in the vicinity of the facility. Reductions in SO<sub>2</sub> elsewhere in the “system” would not be expected to have a significant ameliorative impact on localized ambient air quality and are therefore not an adequate substitute for emission reductions from the Plant. Equally fatal to the use of MATS as a substitute for the 1-hour SO<sub>2</sub> NAAQS, compliance with MATS—unlike the SO<sub>2</sub> NAAQS—does not rely on short emission averaging periods. As noted above, the emission limitations required under MATS have an averaging time of 30 boiler operating days. *See* Proposed Permit at 54, Item 59.2(3). Thirty-day emission limits are not an adequate substitute for short-term emission limits designed to ensure maintenance of a 1-hour ambient air quality standard.<sup>17</sup> Moreover, as the modeling results discussed above demonstrate, the numerical emission MATS limits for SO<sub>2</sub> under MATS are less stringent than the limits that would be required to ensure compliance with the 1-hour SO<sub>2</sub> NAAQS. Finally, the United States Supreme Court on November 25, 2014 granted certiorari on three consolidated legal challenges to the MATS rule, *see* 574 U.S. \_\_ (Order list for Nov. 25, 2014), thereby creating some uncertainty as to the fate of the rule, including the timing of its implementation. For each of these reasons, New York DEC cannot rely on MATS as a proxy for its legal duty to ensure that SO<sub>2</sub> emissions from the Plant do not contravene the 1-hour SO<sub>2</sub> NAAQS.

Ultimately, New York DEC offers no valid basis for its failure to include NAAQS-protective SO<sub>2</sub> emission limits in the Title V permit for the Plant as required by 6 N.Y.C.R.R. § 200.6. EPA should object to the Proposed Permit on this ground.

## **2. EPA Should Object to New York DEC’s Proposed Title V Permit Because the Permit Fails to Require Sufficient Monitoring of Particulate Matter to Ensure Compliance with the Particulate Matter Limit in the Permit.**

A Title V permit must set forth in one place not only all of the requirements applicable to a pollution source, but also provisions needed to assure compliance with each of those requirements. As EPA explained in the preamble to the Title V regulations, “regulations are often written to cover broad source categories” leaving it “unclear which, and how, general regulations apply to a source.” 57 Fed. Reg. 32,250, 32,251 (July 21, 1992). Title V permits bridge this gap by “clarify[ing] and mak[ing] more readily enforceable a source’s pollution control requirements,” including making clear how general regulatory provisions apply to specific sources. S. Rep. 101-228, 1990 USCCAN 3385, 3730 (Dec. 20, 1989). In short, Title V

---

<sup>17</sup> *See supra* note 11.

permits are supposed to link general regulatory provisions to a specific source to “enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” 57 Fed. Reg. at 32,251.

Consistent with this purpose, the Clean Air Act, the federal Title V regulations, and state-level programs all emphasize the importance of compliance assurance provisions, including adequate monitoring. New York DEC is obligated to “set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(a),(c); *see also* 40 C.F.R. § 70.6(c)(1) (providing that all Title V permits “shall contain” “compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit”)<sup>18</sup>; 6 N.Y.C.R.R. § 201-6.4. Unfortunately, the monitoring provisions of the Proposed Permit intended to assure compliance with the PM limitations fall far short of their mark.

The Proposed Permit establishes a PM emission limit of 0.1 lb/MMBtu, applicable to emissions from both boilers. Proposed Permit at 26, Condition 28. To monitor compliance with this limit, the Proposed Permit merely requires that a stack test be carried out once during the term of the permit unless otherwise requested. *Id.* This monitoring provision is wholly inadequate to assure compliance with the applicable PM limits. A single stack test over a period of five or more years<sup>19</sup> does not assure compliance, but instead provides nothing more than a snapshot, often taken under optimal operating conditions, that tells little about the emissions from that unit during the vast majority of the time when the stack test is not occurring. In short, the Proposed Permit’s stack testing provision seeks to measure compliance with the 0.1 lb/MMBtu PM limit using stack results from only a few hours of operation out of a potential 43,800 hours of operation for each unit over the course of at least five years. It simply is not reasonable to conclude that such a limited snapshot is adequate to assure compliance with the Proposed Permit’s PM requirements.

Nor do the Proposed Permit’s separate opacity monitoring provisions ensure that the Plant complies with the PM limit. The Proposed Permit provides for the measurement of opacity using a continuous opacity monitor system (“COMS”). Proposed Permit at 28-29, Condition 30 (requiring the installation and operation of a COMS on each stack and limiting opacity to 20 percent, with certain significant exceptions). The existence of COMS on each stack however does not overcome the failure of the Proposed Permit to require the direct monitoring of PM emissions necessary to ensure compliance with the PM limit.

---

<sup>18</sup> The D.C. Circuit has explained that, under § 70.6(c)(1), “a permitting authority may supplement an inadequate monitoring requirement so that the requirement will “assure compliance with the permit terms and conditions.” *Sierra Club v. U.S. EPA*, 536 F.3d 673, 680 (D.C. Cir. 2008).

<sup>19</sup> In practice, Title V permits often remain in effect for far longer than their mandated five-year term because states fail to issue timely renewals. *See* 40 C.F.R. § 70.6(a)(2); 6 N.Y.C.R.R. § 201-6.4(h). Indeed, New York regulations allow DEC 18 months after the receipt of a complete application to take final action upon a permit renewal. 6 N.Y.C.R.R. § 201-6.6(a)(4). Because regulated entities need only apply for a Title V permit renewal six months prior to the date of expiration, 6 N.Y.C.R.R. § 201-6.2(a)(4), such renewals routinely issue long after a prior permit has expired. Consequently, the requirement that a stack test be conducted once during the term of the permit could mean that only one stack test would be conducted every six or more years. For reference, the Plant’s prior Title V permit was issued in 2008 and expired on October 14, 2013.

As a threshold matter, the Proposed Permit in no way identifies opacity as a surrogate for PM or makes clear that violations of the opacity limit also constitute violations of the PM limit. This presents a significant barrier to using opacity measurements to assert PM violations. Moreover, COMS are inadequate in any event to assure PM compliance because opacity is an imperfect surrogate for PM emissions and does not account for transparent or condensable PM. As such, while the presence of an opacity violation may indicate a PM emissions violation, the absence of an opacity violation does not mean that PM emissions are under the allowable limit.

Instead of relying on a single stack test and inadequate COMS data, the Proposed Permit should be revised to require the use of PM Continuous Emissions Monitoring Systems ("CEMs") on each of the Cayuga stacks in order to assure compliance with the PM limits that apply to each unit. PM CEMs are common technology that have been commercially available for years and have been installed and operated on numerous coal plants throughout the country. EPA promulgated performance specifications for PM CEMs at 40 C.F.R. § 60, Appendix B, Specification 11, on January 12, 2004 and numerous coal-fired power plants currently use PM CEMs, including AEP plants (Ohio and West Virginia); Alcoa Power Generating plants (Indiana); Indianapolis Power & Light Company (Indiana); Progress Energy plants (North Carolina); Tampa Electric power plants (Florida); Eli Lilly Corporation (Indiana); Dominion power plants (Virginia); Louisville Gas and Electric (Kentucky); and the U.S. Department of Energy (Tennessee), to name just a few.<sup>20</sup> Furthermore, EPA has required coal-fired power plants to install, operate, calibrate, and maintain PM CEMs as a term in numerous consent decrees under the New Source Review program.<sup>21</sup> Implicit in these decrees is the fact that PM CEMs are available, reliable, and economically and technically feasible.

In its Response to Comments, New York DEC raised three arguments in defense of its decision not to require PM CEMs. None suffices to justify the issuance of a permit without monitoring requirements adequate to ensure continuous compliance with particulate matter limitations. First, New York DEC argued that "prior testing," used in the preparation of a compliance assurance monitoring plan, demonstrated that PM emissions remained well below the limit, even with the ESP partially de-energized and opacity at 18%. Resp. to Cmts. at 2. No information, however, is provided regarding this purported testing, such as whether it reflected normal operations and what the PM emissions were during the testing. In essence, New York DEC evades rather than confronts the fact that stack tests represent little more than a snapshot in time, often taken under optimal operating conditions, and cannot reasonably be used to assure ongoing compliance with PM requirements.

---

<sup>20</sup> See also U.S. EPA, National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 76 Fed. Reg. 24,976, 25,051-52 (May 3, 2011) ("We evaluated the feasibility and cost of applying PM CEMS to EGUs [and] determined that requiring PM CEMS for EGUs combusting coal or oil is a reasonable monitoring option.").

<sup>21</sup> See, e.g., *Consent Decree in Alabama v. Tennessee Valley Authority*, Civil Action No. 3:11-cv-00170 (E.D. Tenn. June 30, 2011), available at [https://supplier.tva.gov/html/docs/TVA\\_Consent\\_Decree.pdf](https://supplier.tva.gov/html/docs/TVA_Consent_Decree.pdf); *Consent Decree between U.S. EPA and Ohio Citizen Action (Plaintiffs) and American Electric Power Service Corp., et al.*, Civil Action No. C2-99-1250, at par. 107-109 (May 27, 2005), available at [http://www2.epa.gov/sites/production/files/documents/americanelectricpower-cd\\_1.pdf](http://www2.epa.gov/sites/production/files/documents/americanelectricpower-cd_1.pdf).

Second, New York DEC acknowledges that opacity monitoring does not account for transparent or condensable PM, but claims that such shortcoming is irrelevant because “[a] determination of compliance with the state limit in 6 NYCRR Subpart 227-1 does not use test methods that include transparent or condensable emissions.” Resp. to Cmts. at 2. 6 N.Y.C.R.R. § 227-1.2(a)(3), however, does not specify a method of determining compliance with the 0.1 lb/MMBtu limit and the fact remains that PM CEMs provide a readily available, reliable, and economically and technically feasible method of assuring compliance by measuring both filterable and condensable PM. PM CEMs should be used to measure PM emissions, particularly in an instance, such as this, where neither New York DEC nor the Company have established a clear correlation between PM and opacity at the Plant nor even explicitly specified opacity as a surrogate for PM. Notably, New York DEC made no response to Sierra Club’s assertion that the permit should at minimum identify opacity as a surrogate for PM and make clear that violations of the opacity limit also constitute violations of the PM limit.

Finally, New York DEC references the requirement for quarterly stack testing under the federal MATS rule, with which the permit requires compliance no later than April 16, 2015, and which New York DEC finds “more than sufficient.” Resp. to Cmts. at 2. Although preferable to a requirement that only one stack test be conducted each permit term, quarterly stack tests only measure snapshots in time and, therefore, are still inadequate to assure continuous compliance, especially in light of the fact that PM CEMs are available, reliable, and economically and technically feasible. As with New York DEC’s argument on “prior testing,” this response evades recognition of the fundamental inability of isolated stack testing events to assure ongoing compliance with PM requirements. Furthermore, as noted above, New York DEC’s reliance on MATS is misplaced. The United States Supreme Court has granted certiorari on three consolidated legal challenges to the MATS rule, creating some uncertainty regarding the fate of the rule, including the timing of its implementation. *See supra* pp. 10-11. In any event, the more rigorous PM monitoring requirements of the MATS rule aptly demonstrate the inadequacy of using a single stack test and inadequate COMS data to determine continuous compliance with the PM emission limits applicable to the Cayuga units.

Accordingly, New York DEC offers no valid basis for its failure to include sufficient monitoring conditions in the form of a requirement to use PM CEMs to ensure compliance with the stated particulate matter limitations and EPA should likewise object to the Proposed Permit on this ground.

## **V. CONCLUSION**

For the foregoing reasons, EPA must object to the proposed Title V Permit for the Cayuga Generating Station and instruct New York DEC to (1) establish SO<sub>2</sub> limitations sufficient to ensure compliance with the 1-hour SO<sub>2</sub> NAAQS, and (2) establish monitoring requirements sufficient to assure continuous compliance with the PM limits applicable to each unit.

Respectfully submitted,



Joshua Berman  
Sierra Club  
Tel: (202) 650-6062  
Email: [josh.berman@sierraclub.org](mailto:josh.berman@sierraclub.org)

Shannon Fisk  
Moneen Nasmith  
Lisa Perfetto  
Earthjustice  
Tel: (215) 717-4522  
Email: [sfisk@earthjustice.org](mailto:sfisk@earthjustice.org)

Philip Goo  
Law Office of Philip M. Goo, PLLC  
Tel: (404) 583-9451  
Email: [goolawoffice@gmail.com](mailto:goolawoffice@gmail.com)

Counsel for Sierra Club

cc (via U.S. mail):  
John Filippelli, EPA Region 2  
Steven Riva, EPA Region 2  
Jared Snyder, NY DEC  
Edward McTiernan, NY DEC  
Chris Hogan, NY DEC  
Thomas Elter, NY DEC R7