Testimony of Robert Hodanbosi
Ohio EPA
Division of Air Pollution Control

Subcommittee on Regulatory Affairs,
Stimulus Oversight and Government Spending

July 31, 2012

Thank you for the opportunity to provide this committee with information on the effects of U.S. EPA requirements on the coal industry in Ohio and surrounding states. These series of new and additional standards continue to increase the cost of using this important source of domestic fuel.

My name is Robert Hodanbosi and I am Chief of the Division of Air Pollution Control at Ohio EPA. I have almost 40 years of experience in the field of air pollution control and have seen great improvements in air quality in the Ohio Valley and throughout the state. Attached is an example of the dramatic improvement in sulfur dioxide concentrations in Ohio. This improvement came at a substantial cost to Ohio utilities and industry. The reduction of sulfur dioxide emissions even further will require an even greater expense to obtain a diminishing return in improvement in air quality.

There are several regulatory initiatives underway by U.S. EPA that have a direct impact on coal or the major users of coal.

In June of 2010, U.S. EPA promulgated a more restrictive ambient air quality standard for sulfur dioxide at 75 ppb, 1 hour average. This new standard was promulgated without the implementation requirements for states to follow. U.S. EPA issued draft guidance on the air dispersion modeling methodology that should be issued in attainment areas. Over 20 state and local air agencies expressed concern to U.S. EPA over the proposed methodology. After these concerns were raised by state and local air agencies and others, the U.S. EPA held a series of stakeholder meetings to receive comments on possible revisions to the guidance. We are still awaiting the outcome of the meetings and guidance.

One of the important issues raised in the comment period for the sulfur dioxide implementation guidance was the application of the AERMOD model to predict one-hour ambient concentrations of sulfur dioxide. The State of Indiana has conducted a study that clearly shows that the use of AERMOD produces predicted concentrations up to 300% above actual concentrations. We support the State of Indiana in their effort to improve the accuracy of the AERMOD model. Due to the stringency of this new standard, the accuracy of the tools that must be utilized by states to develop emission limitations becomes critical, and we hope that U.S. EPA will seriously evaluate improvements to the AERMOD model.

The Cross State Air Pollution Rule (CSAPR) was promulgated in 2011 to regulate the amount of emissions from utilities that can affect downwind states. This rule restricts the emissions of sulfur dioxide and nitrogen oxides from utilities. The rule allows for limited trading of emissions. Of even greater concern is that this rule applies only to the current PM2.5 ambient air quality standards and the 1997 ozone standard. With the continued tightening of the ambient air quality standards, U.S. EPA will be required to go back and promulgate even more restrictive standards. This leads to more regulatory uncertainty and increased cost to operate coal-fired power plants leading to decreased use of coal. At the request of Ohio EPA, the Ohio Attorney General has appealed the CSAPR to the D. C. Circuit Court of Appeals.

Utility MATS – On February 16, 2012, U.S. EPA promulgated the utility mercury and air toxics rule to reduce emissions from coal-fired power plants. This rule establishes very stringent standards for emissions of mercury, particulate matter, and hydrochloric acid. The federal rule allows three years to comply with the standards so by February 16, 2015, all units must be in compliance. U.S. EPA recognizes that the compliance date will be difficult to achieve for many units and state permitting authorities have the ability to extend the compliance deadline by one year. Ohio EPA has already initiated preliminary discussions with Ohio utilities to outline the documentation that will be necessary to approve the one year extension. Due to the far reaching adverse impacts of this rule, Ohio EPA also requested the Ohio Attorney General to challenge this rule promulgation.

What has been the result of all of these U.S. EPA rules? There have been a series of announcements by the companies that operate power plants in Ohio that the following utility units will be closed:

American Electric Power

- Picway, Unit 5, 100 MW
- Conesville, Unit 3, 165 MW
- Muskingum River, Units 1-4, 840 MW

Duke Energy

- Beckjord Units 1-6, 1120 MW
- Miami Fort, Unit 6, 160 MW

First Energy

- Bay Shore, Units 2-4, 495 MW
- Eastlake, Units 1-5, 1123 MW
- Lake Shore, Unit 18, 245 MW
- Ashtabula, Unit 1, 244 MW

Gen On

- Niles, Units 1-2, 217 MW
- Avon Lake, Units 7&9, 733 MW

These closures will have a direct impact on the mining and the use of coal.

The regional utility distribution company, PJM, recently put out bids for power during the June 2015 to June 2016 timeframe. The bids for base power in the Mid-Atlantic area will be $167 per megawatt. In Northern Ohio, served by First Energy, the cost will be $357 per megawatt, more than double the Mid-Atlantic States. This significant increase in the cost of electricity bids illustrates what can happen as a result of reduced generating capacity.

Finally, although these units are older, that does not mean that these units are no longer used. The Columbus Dispatch reported that some industrial consumers were required to reduce electrical consumption due to a lack of available electricity during the recent heat wave. For American Electric Power Company in Ohio, except for the small Picway unit, the other plants scheduled for shutdown were in operation. Ohio EPA remains concerned that if there are spot shortages of electricity today, the problem will be exacerbated when Ohio loses significant electrical generation capacity due to closures as a result of U.S. EPA requirements.

U.S. EPA has proposed standards for new coal-fired utility plants in the form of New Source Performance Standards (NSPS). In the proposal, U.S. sets a standard for new coal plants to be the same as an efficient new natural gas fired plant. This proposed standard has not been achieved in practice by any coal-fired power plant. The technology is not available today to control CO2 in a cost-effective manner. U.S. EPA recognizes this issue by deferring controls for ten years, if, the utility agrees to more stringent controls for the next twenty years. This "flexibility" is not practical or workable. A new coal-fired power plant will cost 3 to 4 billion dollars. In order to plan, bid, and construct the massive controls would take five years. No utility will risk such a large investment on the hope that controls will be available in five years.

Another aspect of this rule is that both the news release and preamble state that the rule only addresses new sources. However, U.S. EPA signed a consent decree that commits the agency to regulate new, modified, or existing sources. Once this NSPS rule is promulgated, U.S. EPA will have no choice but to go forward on regulating existing sources under 111(d) of the Clean Air Act. Again, there are no cost effective controls for CO2 from existing power plants. This particular issue will have a huge impact on the continued operation of coal-fired power plants in the Midwest and elsewhere. Please find attached the consent decree signed by U.S. EPA.

Application of Greenhouse Gas Rules to Underground Coal Mines – U. S. EPA promulgated requirements that major sources of Greenhouse Gas emissions must

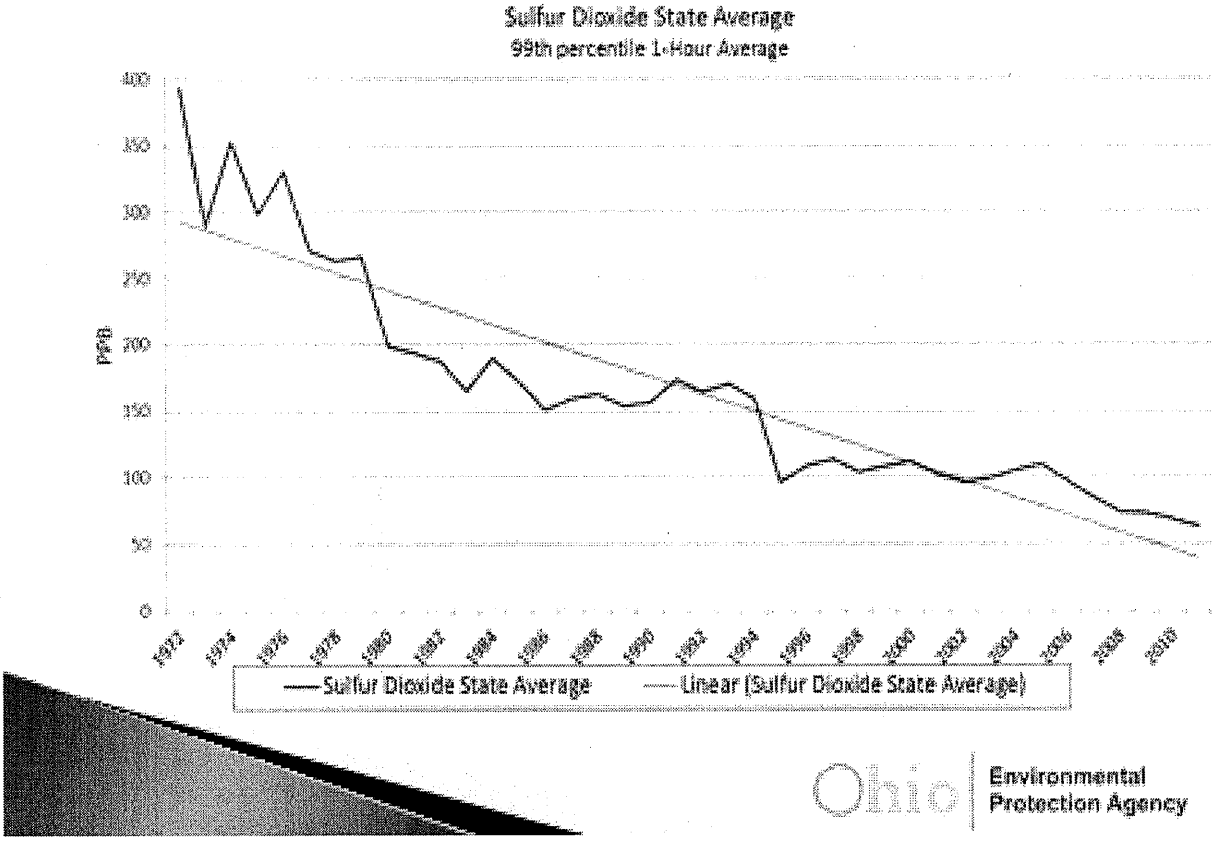
apply for Title V permits by July 1, 2012. In many cases, this requirement does not apply to "fugitive" sources, meaning sources that do not have a discrete emission point of release. The question has arisen as to whether an underground coal mine shall be treated as a "fugitive" source. U.S. EPA's initial reaction was that these sources should be treated as "point" sources and subject to Title V permitting requirements. In response, Ohio, along with Illinois, Indiana, Kentucky, Virginia and West Virginia, requested that U.S. EPA revisit this determination since the nature of venting of coal mines is fugitive in nature. Please find attached letter from states to U.S. EPA.

There are also additional requirements that U.S. EPA is proposing on facilities that use coal. U.S. EPA is moving forward to tighten the limitations on water discharges from coal-fired power plants and to change the manner that coal residuals are regulated.

Finally, any significant increase in electric rates will have additional adverse impacts on Ohio industry. For example, the only two manganese ferroalloy plants in the United States are located in Marietta, Ohio, and New Haven, West Virginia. These plants are located near power plants due to the large electric demand needed to make this product. These plants can only remain competitive if there is reliable, inexpensive, electric power. This same issue applies to aluminum producer Ormet in Hannibal, Ohio and other metal and alloy manufacturers in Ohio. For Ohio and other states to maintain an industrial base, there will continue to be a need for inexpensive power.

Thank you for the opportunity to present these views on behalf of Ohio EPA. We would be glad to work with the committee to provide recommendations on U.S. EPA requirements that are protective of public health but that do not have as great an adverse impact on coal and coal related industries.

Sulfur Dioxide Air Quality Trend (1972-2011)



Ohio Environmental Protection Agency

Ohio | **Environmental Protection Agency**

John R. Kasich, **Governor**
Mary Taylor, **Lt. Governor**
Scott J. Nally, **Director**

June 5, 2012

Ms. Janet McCabe, Deputy Assistant Administrator
U.S. EPA
Office of Air and Radiation
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Ms. McCabe:

I am writing on behalf of multiple states ((Illinois, Indiana, Kentucky, Ohio, Virginia, West Virginia) (the states) with active underground coal mines that have been evaluating the need to request Title V permit applications from coal mine owner or operators as a result of greenhouse gas (GHG) emissions. As you know, the major greenhouse gas emission of concern is methane which occurs naturally in mines. Methane can present a serious explosion risk and therefore is vented in order to provide a safe working environment. Depending on the mine configuration and size, the active underground coal mines may have ventilations systems that push air in, pull air out, alternate between pushing and pulling, or do both simultaneously through elaborate ventilation systems. Under each ventilation scenario it is essential to have multiple outlets for the methane/air mixture to go that is independent of the ventilation air mechanism. These additional ventilation points are usually through "boreholes" which are sometimes used for conveyors, ingress and egress of workers, and for running critical utility lines into the coal mine.

The two main issues that states have been struggling with are (1) how to calculate the amount of methane emissions and to ensure that the calculation methodology is uniform across the states, and (2) whether the methane emissions from active mines should be considered as fugitive. Based on an evaluation by the states, we believe the first issue can be addressed by using the methodology provided by U.S. EPA in the greenhouse gas reporting rule. If this emissions calculation methodology is widely utilized, then there would be a fairly consistent approach to the calculation of methane emissions among the states.

Regarding the second issue, the consensus among the states is that it methane emissions from active underground mines are appropriately characterized as "fugitive" emissions. First, the reporting GHG Reporting Rule discussed the calculation of GHGs from underground coal mines and characterized the emissions from ventilation air systems and degasification systems as fugitive. 68 Fed. Reg. 16448, 16553. Second, the emissions of methane from mines cannot reasonably be captured. The overriding

50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

614 | 644 3020
614 | 644 3184 (fax)
www.epa.ohio.gov

purpose of the ventilation is to assure a safe working environment in the mine and capture systems interfere with the ventilation system and pose a substantial safety risk for workers. Because of this, requiring methane capture systems would not be acceptable. Third, many mines have multiple ingress/egress points where the methane is vented.

The viewpoint of the states concerning coal mine methane emissions is supported by past U.S. EPA guidance. As early as 1980 the U.S. EPA stated in the preamble to the promulgation of the definition for "fugitive emissions" stated that the ability to "collect" emissions is an important variable in defining fugitive emissions. 45 Fed. Reg. 52692-93 (August. 7, 1980). Later, a U.S. EPA memorandum dated February 10, 1999, from Thomas C. Curran to Judith Katz (The Curran memo) set out factors to be considered in determining whether emissions are fugitive. The Curran memo set out factors that should be analyzed to determine if emissions can be "reasonably collected" The Curran memo stated that at a facility where emissions are not actually collected, this inquiry should include an analysis of (1) the reasonableness of the collection, including, but not limited to, cost considerations; (2) whether similar facilities are subject to national standards and State implementation plan (SIP) requirements (e.g. reasonably achievable control technology, best available control technology, or lowest achievable emission rate) requiring collection, and (3) whether similar sources actually collect emissions.

With regard to coal mine methane emissions, the industry currently does not have a national standard for collection or control of methane emissions. Further, the only coal mine methane abatement system that has been used to capture and abate emissions at a coal mine in the United States is the Biothermica Vamox system which is being experimentally used at an active underground coal mine near Brookwood, Alabama. The experimental Vamox unit is a 30,000 cfm (cubic feet per minute) system with potential expansion to 80,000 cfm. A typical active underground mine would require more than ten units to mitigate coal mine methane.[1] The lack of a national standard, the inherent safety risk, and the current exorbitant cost of collection at the majority of coal mines in the U.S. all tip the scale toward considering active underground coal mine emissions as fugitive emissions pursuant to U.S. EPA guidance.

We do not believe, therefore, that these facilities should be required to obtain a Title V permit since, at this time, the emissions of GHGs are most appropriately characterized as fugitive emissions. Additionally, the issuance of a Title V permit to active coal mines would simply be a paperwork exercise since there are no applicable requirements to include in the permit. The issuance of Title V permits would have no environmental benefit, but would further stress the States' resources. The undersigned States are not planning to solicit applications from these entities, and attached is the letter that we plan

[1] The trial and experimentation is not tied to any compliance requirement, and also this experimentation may not be generally applicable since this particular mine has very gassy coal seams. The project was financed primarily by Biothermica to generate an income stream from carbon credits through different GHG reduction schemes and markets. Coalbed Methane Extra, EPA-430-N-00-004 (July 2008).

to send to entities in our state when asked if a Title V permit is needed for an active underground coal mine.

We understand that on May 22, 2012, U.S. EPA's Office of Air Quality Planning and Standards sent an email to Misti Duvall of the National Association of Clean Air Administrators (NACAA) in which U.S EPA expressed its initial thought that active coal mines where "emissions ... are captured and vented through ductwork out of the mine" may be subject to Title V. We believe that this determination is not consistent with typical mining operations and based on the information presented in this letter, we request that you reconsider your initial thoughts on this subject. With the deadline of July 1, 2012 for applications rapidly approaching, if U.S. EPA believes that our analysis is incorrect, we would appreciate a prompt response.

If you have any questions, feel free to contact me at 614-644-2270.

Thank you for your assistance.

Sincerely,

Robert Hodanbosi

Robert Hodanbosi, Chief
Division of Air Pollution Control

cc: Juan Santiago, US EPA, RTP
Misti Duvall, NACAA
Laurel Kroack, Illinois
Keith Baugues, Indiana
John Lyons, Kentucky
Michael Dowd, Virginia
John Benedict, West Virginia

SAMPLE RESPONSE LETTER

To whom it may concern:

The State of ____ along with the States listed below have written this letter to address an air quality permitting issue involving underground coal mines. Underground coal mines are located in each of our States. We are aware of the liberation of methane gas in mines and the serious explosion risk that is present in the mines. Gas must be vented in order to provide a safe working environment. Depending on the size and the underground footprint of the mine, it may be necessary to have multiple points where the methane is vented, along with large volumes of air.

The issue which has come to our attention is whether Title V operating permits must be obtained by these mines, assuming that CO2e emissions exceed the threshold for Title V applicability (100,000 tons/year CO2e). Our determination is that Title V permitting is not required, because the methane emissions should be considered fugitive emissions. This determination is consistent with USEPA description of methane emissions as fugitive in its guidance on quantifying emissions from mines.

The primary basis for our determination is that the methane emissions from a working mine can be emitted from multiple exits and are diluted that capture and control is technically and economically infeasible. Secondarily, any Title V permit issued to a mine would be "hollow", i.e., it would not contain any substantive control requirements, since none exist. The issuance of a Title V permit would further stress our permitting resources for no environmental benefit. Please see the enclosed letter from several states sent to US EPA that presents a detailed explanation of why the emissions should be treated as fugitive. Also for your information is a recent email from US EPA on the subject that was sent prior to the combined states letter.

Therefore, we do not plan to solicit or act upon any Title V permit applications from underground coal mines at this time. If questions arise, please contact me at (____) - ___ - ____.

Sincerely,

State Air Director

Ron Gore, Alabama
Laurel Kroack, Illinois
Keith Baugues, Indiana
Robert Hodanbosi, Ohio
Michael Dowd, Virginia
John Benedict, West Virginia

Hodanbosi, Bob

Subject: FW: TV GHG applicability for underground coal mines
Attachments: graycol.gif

From: Juan Santiago [Santiago.Juan@epamail.epa.gov]
Sent: Tuesday, May 22, 2012 2:26 PM
To: Misti Duvall
Cc: Anna Wood; Janet McDonald
Subject: RE: TV GHG applicability for underground coal mines

Hi Misti,

Sorry for the delay in responding to your question. We have been discussing it internally and based on our understanding of the industry, our initial thoughts are that these emissions need to be considered point source emissions as they are captured and vented through ductwork out of the mine. There may be variations in the way methane is vented out of underground coal mines and these would have to be considered for a particular permitting action. If you have a state that is dealing with a particular permitting action and would like to discuss the specifics of the mine design and how they deal with their methane emissions, please let us know and we will be happy to work with the state and the region to reach a resolution of the particular permit action.

Thanks and don't hesitate to contact me if you have any questions.

Juan

SETTLEMENT AGREEMENTS TO ADDRESS GREENHOUSE GAS EMISSIONS FROM ELECTRIC GENERATING UNITS AND REFINERIES

FACT SHEET

ACTION

- The Environmental Protection Agency (EPA) entered into two proposed settlement agreements to issue rules that will address greenhouse gas emissions from certain fossil fuel-fired powerplants--electric generating units (EGUs)--and refineries.

- For natural gas, oil, and coal-fired EGUs: these rules would establish new source performance standards (NSPS) for new and modified EGUs and emission guidelines for existing EGUs. Under today's agreement with the States of New York, California, Connecticut, Delaware, Maine, New Mexico, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York; Natural Resources Defense Council (NRDC), Sierra Club, and Environmental Defense Fund (EDF), EPA would commit to issuing proposed regulations by July 26, 2011 and final regulations by May 26, 2012.

    - EPA is coordinating this action on GHGs with a number of other required regulatory actions for traditional pollutants including the Utility MACT rule, the Transport Rule and New Source Performance Standards for criteria pollutants. Together, EGUs will be able to develop strategies to reduce all pollutants in a more efficient and cost-effective way than addressing these pollutants separately.

- For refineries: EPA has entered into a separate agreement with the States of New York, California, Connecticut, Delaware, Maine, New Hampshire, New Mexico, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York; Natural Resources Defense Council (NRDC), Sierra Club, and Environmental Integrity Project that establishes a different schedule for the Agency to issue regulations addressing greenhouse gases from refineries.

    - This settlement agreement establishes a comprehensive approach of simultaneously addressing different types of air pollution (GHG, toxics and "criteria" pollutants) from different points at the refinery at the same time and in accord with EPA's Clean Air Act obligations to control emissions from this sector.

    - In addition to an NSPS for new and modified refineries, and emission guidelines for existing refineries, EPA commits to conduct a risk and

technology review of current air toxic standards for refineries.

- As part of this settlement agreement, EPA also commits to resolve the issues raised in an August 25, 2008 petition for reconsideration of the refinery NSPS. EPA would propose regulations to address all these issues by December 10, 2011 and finalize regulations by November 10, 2012.

- Before proposing these new regulations, EPA will conduct additional data collection from refineries.

- In addition, beginning in early 2011, EPA intends to conduct public and stakeholder outreach in the form of listening sessions

- A notice of these proposed settlement agreements will be published in the Federal Register and a 30-day public comment period will follow publication.

BACKGROUND

- New source performance standards have been established since the 1970s for various industrial sources of air pollution that significantly endanger public health and welfare. Each NSPS must be reviewed at least every eight years and if appropriate, revised.

- In addition to the NSPS requirements established for new and modified sources, for pollutants not regulated under other parts of the Clean Air Act, EPA must establish emission guidelines that States use to develop plans for reducing emissions from existing sources. The guidelines include targets based on demonstrated controls, emission reductions, costs and expected timeframes for installation and compliance, and can be less stringent than the requirements imposed on new sources. Under existing EPA regulations, States must submit their plans to EPA within nine months after the guidelines' publication unless EPA sets a different schedule.

    - States have the ability to apply less stringent standards or longer compliance schedules if they demonstrate that following the federal guidelines is unreasonably cost-prohibitive, physically impossible, or that there are other factors that reasonably preclude meeting the guidelines.

    - States may also impose more stringent standards or shorter compliance schedules.

- These actions address several matters pending before the Agency:
    - In September 2007, EPA took a remand of its February 2006 final decision not to set GHG standards for boilers. State petitioners sent EPA letters in June 2008 and August 2009 asking about the status of the remand and Sierra Club, Environmental Defense Fund, and NRDC recently sent similar inquiries. Today's agreement does not address industrial boilers, which were also subject to the remand.

    - In August 2008, Natural Resources Defense Council (NRDC) and others petitioned EPA to reconsider a June 2008 final decision not to set CO2 and methane NSPS for refineries. Petitioners also brought an action in the U.S. Court of Appeals for the D.C. Circuit challenging several aspects of the final rule including the failure to address GHG. In December 2009, EPA agreed to reconsider that decision, including the decision to not regulate greenhouse gases.

- This schedule provides a measured and sensible path forward that will allow the agency to address GHG pollution that threatens the health and welfare of Americans, and contributes to climate change. These standards are part of EPA's common-sense approach to addressing GHG from the largest industrial emissions sources.

- For more information about the settlement agreements, please contact Susan Stahle (202)564-1272 regarding refineries and Elliott Zenick (202)564-1822 regarding utilities.

- For a copy of the settlement agreement and more information about the current new source performance standards for EGUs visit http://www.epa.gov/ttn/atw/nsps/electric/elecgenpg.html

- For a copy of the settlement agreement and more information about the current new source performance standards for refineries, visit http://www.epa.gov/airquality/ghgsettlement.html

SETTLEMENT AGREEMENT

This Settlement Agreement is made by and between the following groups of Petitioners: (1) the States of New York, California, Connecticut, Delaware, Maine, New Mexico, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York (collectively "State Petitioners"); and (2) Natural Resources Defense Council (NRDC), Sierra Club, and Environmental Defense Fund (EDF) (collectively "Environmental Petitioners"), and Respondent, the U.S. Environmental Protection Agency ("EPA") (collectively "the Parties").

WHEREAS, EPA published a final action entitled "Standards of Performance for Electric Utility Steam Generating Units, Industrial-Commercial-Institutional Steam Generating Units, and Small Industrial-Commercial-Institutional Steam Generating Units," 71 Fed. Reg. 9,866 (Feb. 27, 2006) (the "Final Rule");

WHEREAS, the Final Rule included amendments to the standards of performance for electric utility steam generating units subject to 40 C.F.R. part 60, subpart Da ("EGUs");

WHEREAS, in connection with this Final Rule, EPA declined to establish standards of performance for greenhouse gas ("GHG") emissions;

WHEREAS, State and Environmental Petitioners filed petitions for judicial review of the Final Rule under the Clean Air Act ("CAA") Section 111, 42 U.S.C. § 7411, contending, *inter alia*, that the Final Rule was required to include standards of performance for GHG emissions from EGUs;

WHEREAS, the portions of State and Environmental Petitioners' petitions for review of the Final Rule that related to GHG emissions were severed from other petitions for review of the Final Rule, and were formerly pending before the United States Court of Appeals for the District

of Columbia Circuit (the "Court") under the caption *State of New York, et al. v. EPA*, No. 06-1322;

WHEREAS, following the Supreme Court's decision in *Massachusetts v. EPA,* 549 U.S. 497 (2007), EPA requested remand of the Final Rule to EPA for further consideration of the issues related to GHG emissions in light of that decision;

WHEREAS, the Court remanded the Final Rule to EPA for further proceedings on GHG emissions in light of *Massachusetts v. EPA*, by its Order of September 24, 2007 (the "Remand Order");

WHEREAS, as of the date of this Settlement Agreement, EPA has not taken any publicly noticed action to respond to the Remand Order;

WHEREAS, the State Petitioners submitted letters to EPA dated June 16, 2008 and August 4, 2009 inquiring as to the status of EPA's action on the remand and stating their position that EPA had a legal obligation to act promptly to comply with the requirements of Section 111, and Environmental Petitioners submitted a letter to EPA on August 20, 2010 seeking commitments to rulemaking on GHG emissions from EGUs as a means of avoiding further litigation;

WHEREAS, EGUs are, collectively, the largest source category of GHG emissions in the United States, according to a recent EPA analysis. *See* 74 Fed. Reg. 56,260, 56,363 (Oct. 30, 2009);

WHEREAS, EPA's initial evaluation of available GHG control strategies indicates that there are cost-effective control strategies for reducing GHGs from EGUs;

WHEREAS, EPA believes it would be appropriate for it to concurrently propose performance standards for GHG emissions from new and modified EGUs under CAA section

111(b), 42 U.S.C. § 7411(b), and emissions guidelines for GHG emissions from existing affected EGUs pursuant to CAA section 111(d), 42 U.S.C. § 7411(d), and 40 C.F.R. § 60.22;

WHEREAS, the Parties wish to enter into this Settlement Agreement to resolve the State and Environmental Petitioners' request for performance standards and emission guidelines for GHG emissions under CAA sections 111(b) and 111(d) and to avoid further litigation on this issue, without any admission or adjudications of fact or law;

NOW THEREFORE, the Parties, intending to be bound by this Settlement Agreement, hereby stipulate and agree as follows:

1. EPA will sign by July 26, 2011, and will transmit to the Office of the Federal Register within five business days, a proposed rule under section 111(b) that includes standards of performance for GHGs for new and modified EGUs that are subject to 40 C.F.R. part 60, subpart Da. EPA shall provide the State and Environmental Petitioners a copy of the proposed rule within five business days of signature.

2. EPA will also sign by July 26, 2011, and will transmit to the Office of the Federal Register within five business days, a proposed rule under section 111(d) that includes emissions guidelines for GHGs from existing EGUs that would have been subject to 40 C.F.R. part 60, subpart Da if they were new sources. EPA shall provide the State and Environmental Petitioners a copy of the proposed rule within five business days of signature.

3. After considering any public comments received concerning the proposed rule described in Paragraph 1, EPA will sign no later than May 26, 2012, and will transmit to the Office of the Federal Register within five business days, a final rule that takes final action with respect to the proposed rule described in Paragraph 1. EPA shall provide the

Environmental and State Petitioners with a copy of its final action within five business days of signature.

4. If EPA finalizes standards of performance for GHGs pursuant to Paragraph 3, then based on consideration of the public comments received concerning the proposed rule described in Paragraph 2, EPA will sign no later than May 26, 2012, and will transmit to the Office of the Federal Register within five business days, a final rule that takes final action with respect to the proposed rule describe in Paragraph 2. EPA shall provide the State and Environmental Petitioners with a copy of its final action within five business days of signature.

5. EPA agrees that it will make staff available by telephone at least every 60 days to update State and Environmental Petitioners on EPA's progress in completing the actions described in Paragraphs (1) through (4). In addition, EPA will provide State and Environmental Petitioners with a status letter every 60 days, which shall include an affirmative statement of whether EPA believes it will timely complete all actions described in Paragraphs 1 through 4.

6. Upon EPA's fulfillment of each of the obligations stated in Paragraphs 1 through 4 above, this Settlement Agreement shall constitute a full and final release of any claims that State and Environmental Petitioners may have under any provision of law to compel EPA to respond to the Court's Remand Order with respect to GHG emissions from EGUs.

7. State and Environmental Petitioners shall not file any motion or petition seeking to compel EPA action in response to the Remand Order with respect to GHG emissions from EGUs unless EPA has first failed to meet an obligation stated in Paragraphs 1

through 4 above. If EPA fails to meet such an obligation, or if an EPA status letter described in Paragraph 5 does not affirm that EPA believes it will timely complete all actions described in Paragraphs 1 through 4, or if EPA fails to send a status letter as described in Paragraph 5 and does not promptly cure that failure upon receiving notice, State and Environmental Petitioners' sole remedy shall be to file an appropriate motion or petition with the Court or other civil action seeking to compel EPA to take action responding to the Remand Order. In that event, all Parties reserve any claims or defenses they may have in such an action, and the dates stated in Paragraphs 1 through 4 shall be construed to represent only the parties' attempt to compromise claims in litigation, and not to represent agreement that any particular schedule for further agency action is reasonable or otherwise required by law. State and Environmental Petitioners reserve all rights under the law to file petitions for review of final agency actions under this Settlement Agreement, pursuant to section 307(b), 42 U.S.C. § 7607(b).

8. This Settlement Agreement constitutes the sole and entire understanding of EPA and the Environmental and State Petitioners and no statement, promise or inducement made by any Party to this Settlement Agreement, or any agent of such Parties, that is not set forth in this Settlement Agreement shall be valid or binding.

9. Except as expressly provided in this Settlement Agreement, none of the Parties waives or relinquishes any legal rights, claims or defenses it may have. State and Environmental Petitioners reserve the right to seek attorneys' fees and costs relating to this litigation, and EPA reserves any defenses it may have relating to such claims.

10. The provisions of this Settlement Agreement can be modified at any time by written mutual consent of the Parties.

11. Except as expressly provided herein, nothing in the terms of this Settlement Agreement shall be construed to limit or modify the discretion accorded EPA by the CAA or by general principles of administrative law.

12. The commitments by EPA in this Settlement Agreement are subject to the availability of appropriated funds. No provision of this Settlement Agreement shall be interpreted as or constitute a commitment or requirement that EPA obligate, expend or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. 1341, or any other applicable appropriations law or regulation, or otherwise take any action in contravention of those laws or regulations.

13. Nothing in the terms of this Settlement Agreement shall be construed to limit EPA's authority to alter, amend or revise any final rule EPA may issue pursuant to Paragraphs 3 or 4, or to promulgate superseding regulations.

14. The Parties agree and acknowledge that before this Settlement Agreement is final, EPA must provide notice in the Federal Register and an opportunity for public comment pursuant to CAA Section 113(g), 42 U.S.C. 7413(g). After this Settlement Agreement has undergone an opportunity for notice and comment, the Administrator and/or the Attorney General, as appropriate, shall promptly consider any such written comments in determining whether to withdraw or withhold her/his consent to the Settlement Agreement, in accordance with section 113(g) of the CAA. Within 30 days of the close of the public comment period, EPA shall provide written notice to State and Environmental Petitioners of any decision to withdraw or withhold consent or shall provide written notice of finality. This Settlement Agreement shall become final on the

date that EPA provides written notice of such finality to the State and Environmental Petitioners.

15. The undersigned representatives of each Party certify that they are fully authorized by the Party that they represent to bind that respective Party to the terms of this Settlement Agreement. This Settlement Agreement will be deemed to be executed when it has been signed by the representatives of the Parties set forth below, subject to final approvals pursuant to Paragraph 14.

DATE: 12/21/10

David Gunter /s/

DAVID GUNTER
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
P.O. Box 23986
Washington, D.C. 20026-3986

Counsel for U.S. Environmental Protection Agency

DATE:_____

MICHAEL J. MYERS
MORGAN A. COSTELLO
Assistant Attorneys General
Environmental Protection Bureau
Office of the Attorney General, The Capitol
Albany, New York 12224

Counsel for State of New York

DATE:_____

KENNETH P. ALEX
SUSAN DURBIN
Office of the Attorney General, State of California
1515 Clay Street, 20th Floor, P.O. Box 70550
Oakland, CA 94612

Counsel for State of California

date that EPA provides written notice of such finality to the State and Environmental Petitioners.

15. The undersigned representatives of each Party certify that they are fully authorized by the Party that they represent to bind that respective Party to the terms of this Settlement Agreement. This Settlement Agreement will be deemed to be executed when it has been signed by the representatives of the Parties set forth below, subject to final approvals pursuant to Paragraph 14.

DATE:_____

DAVID GUNTER
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
P.O. Box 23986
Washington, D.C. 20026-3986

Counsel for U.S. Environmental Protection Agency

DATE: 12/16/2010

MICHAEL J. MYERS
MORGAN A. COSTELLO
Assistant Attorneys General
Environmental Protection Bureau
Office of the Attorney General, The Capitol
Albany, New York 12224

Counsel for State of New York

DATE:_____

KENNETH P. ALEX
SUSAN DURBIN
Office of the Attorney General, State of California
1515 Clay Street, 20th Floor, P.O. Box 70550
Oakland, CA 94612

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DAVID GUNTER
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
P.O. Box 23986
Washington, D.C. 20026-3986

Counsel for U.S. Environmental Protection Agency

DATE:_____

MICHAEL J. MYERS
MORGAN A. COSTELLO
Assistant Attorneys General
Environmental Protection Bureau
Office of the Attorney General, The Capitol
Albany, New York 12224

Counsel for State of New York

DATE: 12/8/10

KENNETH P. ALEX
SUSAN DURBIN
Office of the Attorney General, State of California
1515 Clay Street, 20th Floor, P.O. Box 70550
Oakland, CA 94612

Counsel for State of California

DATE:_____

KIMBERLY MASSICOTTE
MATTHEW I. LEVINE
Assistant Attorneys General
Office of the Attorney General
P.O. Box 120, 55 Elm Street
Hartford, Connecticut 06141-0120

Counsel for State of Connecticut

DATE:_____

VALERIE M. SATTERFIELD
Deputy Attorney General
Department of Justice
102 W. Water Street
Dover, DE 19904

Counsel for State of Delaware

DATE:_____

GERALD D. REID
Assistant Attorney General
Department of the Attorney General
State House Station #6
Augusta, Maine 04333-0006

Counsel for State of Maine

DATE:_____

SETH COHEN
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
P.O. Drawer 1508
Santa Fe, New Mexico 87504-1508

Counsel for State of New Mexico

DATE:_____

KIMBERLY MASSICOTTE
MATTHEW I. LEVINE
Assistant Attorneys General
Office of the Attorney General
P.O. Box 120, 55 Elm Street
Hartford, Connecticut 06141-0120

Counsel for State of Connecticut

DATE: 12/15/2010

VALERIE M. SATTERFIELD
Deputy Attorney General
Department of Justice
102 W. Water Street
Dover, DE 19904

Counsel for State of Delaware

DATE:_____

GERALD D. REID
Assistant Attorney General
Department of the Attorney General
State House Station #6
Augusta, Maine 04333-0006

Counsel for State of Maine

DATE:_____

SETH COHEN
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
P.O. Drawer 1508
Santa Fe, New Mexico 87504-1508

Counsel for State of New Mexico

DATE:_____

KIMBERLY MASSICOTTE
MATTHEW I. LEVINE
Assistant Attorneys General
Office of the Attorney General
P.O. Box 120, 55 Elm Street
Hartford, Connecticut 06141-0120

Counsel for State of Connecticut

DATE:_____

VALERIE M. SATTERFIELD
Deputy Attorney General
Department of Justice
102 W. Water Street
Dover, DE 19904

Counsel for State of Delaware

DATE: 12/8/10

GERALD D. REID
Assistant Attorney General
Department of the Attorney General
State House Station #6
Augusta, Maine 04333-0006

Counsel for State of Maine

DATE:_____

SETH COHEN
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
P.O. Drawer 1508
Santa Fe, New Mexico 87504-1508

Counsel for State of New Mexico

DATE:_____

KIMBERLY MASSICOTTE
MATTHEW I. LEVINE
Assistant Attorneys General
Office of the Attorney General
P.O. Box 120, 55 Elm Street
Hartford, Connecticut 06141-0120

Counsel for State of Connecticut

DATE:_____

VALERIE M. SATTERFIELD
Deputy Attorney General
Department of Justice
102 W. Water Street
Dover, DE 19904

Counsel for State of Delaware

DATE:_____

GERALD D. REID
Assistant Attorney General
Department of the Attorney General
State House Station #6
Augusta, Maine 04333-0006

Counsel for State of Maine

DATE: 12/8/2010

SETH COHEN
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
P.O. Drawer 1508
Santa Fe, New Mexico 87504-1508

Counsel for State of New Mexico

DATE: 12/14/2010

PAUL S. LOGAN
Assistant Attorney General
Department of Justice
1162 Court Street, N.E.
Salem, Oregon 97301

Counsel for State of Oregon

DATE:_____

GREGORY S. SCHULTZ
MICHAEL RUBIN
Special Assistant Attorneys General
Rhode Island Department of the Attorney General
150 South Main Street
Providence, Rhode Island 02903

Counsel for State of Rhode Island

DATE:_____

THEA J. SCHWARTZ
Assistant Attorney General
Environmental Division
Office of the Attorney General
109 State Street
Montpelier, VT 05609-1001

Counsel for State of Vermont

DATE:_____

LESLIE R. SEFFERN
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504

Counsel for State of Washington

DATE:_____

PAUL S. LOGAN
Assistant Attorney General
Department of Justice
1162 Court Street, N.E.
Salem, Oregon 97301

Counsel for State of Oregon

DATE: 12/13/2010

GREGORY S. SCHULTZ
MICHAEL RUBIN
Special Assistant Attorneys General
Rhode Island Department of the Attorney General
150 South Main Street
Providence, Rhode Island 02903

Counsel for State of Rhode Island

DATE:_____

THEA J. SCHWARTZ
Assistant Attorney General
Environmental Division
Office of the Attorney General
109 State Street
Montpelier, VT 05609-1001

Counsel for State of Vermont

DATE:_____

LESLIE R. SEFFERN
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504

Counsel for State of Washington

DATE:_____

PAUL S. LOGAN
Assistant Attorney General
Department of Justice
1162 Court Street, N.E.
Salem, Oregon 97301

Counsel for State of Oregon

DATE:_____

GREGORY S. SCHULTZ
MICHAEL RUBIN
Special Assistant Attorneys General
Rhode Island Department of the Attorney General
150 South Main Street
Providence, Rhode Island 02903

Counsel for State of Rhode Island

DATE: 12/10/10

THEA J. SCHWARTZ
Assistant Attorney General
Environmental Division
Office of the Attorney General
109 State Street
Montpelier, VT 05609-1001

Counsel for State of Vermont

DATE:_____

LESLIE R. SEFFERN
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504

Counsel for State of Washington

DATE:_____

PAUL S. LOGAN
Assistant Attorney General
Department of Justice
1162 Court Street, N.E.
Salem, Oregon 97301

Counsel for State of Oregon

DATE:_____

GREGORY S. SCHULTZ
MICHAEL RUBIN
Special Assistant Attorneys General
Rhode Island Department of the Attorney General
150 South Main Street
Providence, Rhode Island 02903

Counsel for State of Rhode Island

DATE:_____

THEA J. SCHWARTZ
Assistant Attorney General
Environmental Division
Office of the Attorney General
109 State Street
Montpelier, VT 05609-1001

Counsel for State of Vermont

DATE: 12-10-10

LESLIE R. SEFFERN
Assistant Attorney General
Office of the Attorney General
P.O. Box 40117
Olympia, Washington 98504

Counsel for State of Washington

DATE: November 17, 2010

DONNA M. MURASKY
Deputy Solicitor General
Office of the D.C. Attorney General
441 Fourth Street, N.W.
Washington, D.C. 20001

Counsel for District of Columbia

DATE: _____

WILLIAM L. PARDEE
Assistant Attorney General
Environmental Protection Division
One Ashburton Place
Boston, Massachusetts 02108

Counsel for Commonwealth of Massachusetts

DATE: _____

CHRISTOPHER G. KING
New York City Law Department
100 Church Street
New York, NY 10007

Counsel for City of New York

DATE: _____

DONNA M. MURASKY
Deputy Solicitor General
Office of the D.C. Attorney General
441 Fourth Street, N.W.
Washington, D.C. 20001

Counsel for District of Columbia

DATE: Dec 9, 2010

WILLIAM L. PARDEE
CAROL IANCU
Assistant Attorneys General
Environmental Protection Division
Office of the Attorney General
One Ashburton Place
Boston, Massachusetts 02108

Counsel for Commonwealth of Massachusetts

DATE: _____

CHRISTOPHER G. KING
CARRIE NOTEBOOM
New York City Law Department
100 Church Street
New York, NY 10007

Counsel for City of New York

DATE:_____

DONNA M. MURASKY
Deputy Solicitor General
Office of the D.C. Attorney General
441 Fourth Street, N.W.
Washington, D.C. 20001

Counsel for District of Columbia

DATE:_____

WILLIAM L. PARDEE
CAROL IANCU
Assistant Attorneys General
Environmental Protection Division
Office of the Attorney General
One Ashburton Place
Boston, Massachusetts 02108

Counsel for Commonwealth of Massachusetts

DATE: 12·10·10

CHRISTOPHER G. KING
CARRIE NOTEBOOM
New York City Law Department
100 Church Street
New York, NY 10007

Counsel for City of New York

DATE: 12/16/2010

DAVID D. DONIGER
Natural Resources Defense Council
1200 New York Avenue NW, Suite 400
Washington, DC 20005

Counsel for Natural Resources Defense Council

DATE: 12/16/2010

JOANNE SPALDING
Sierra Club
85 Second Street
San Francisco, CA 94105

Counsel for Sierra Club

DATE: 12/20/2010

VICKIE PATTON
Environmental Defense Fund
2334 N. Broadway
Boulder, CO 80304

Counsel for Environmental Defense Fund

GULPING THE JUICE

Some businesses ordered to cut power

Electricity demand in 13-state region hits 2012 high

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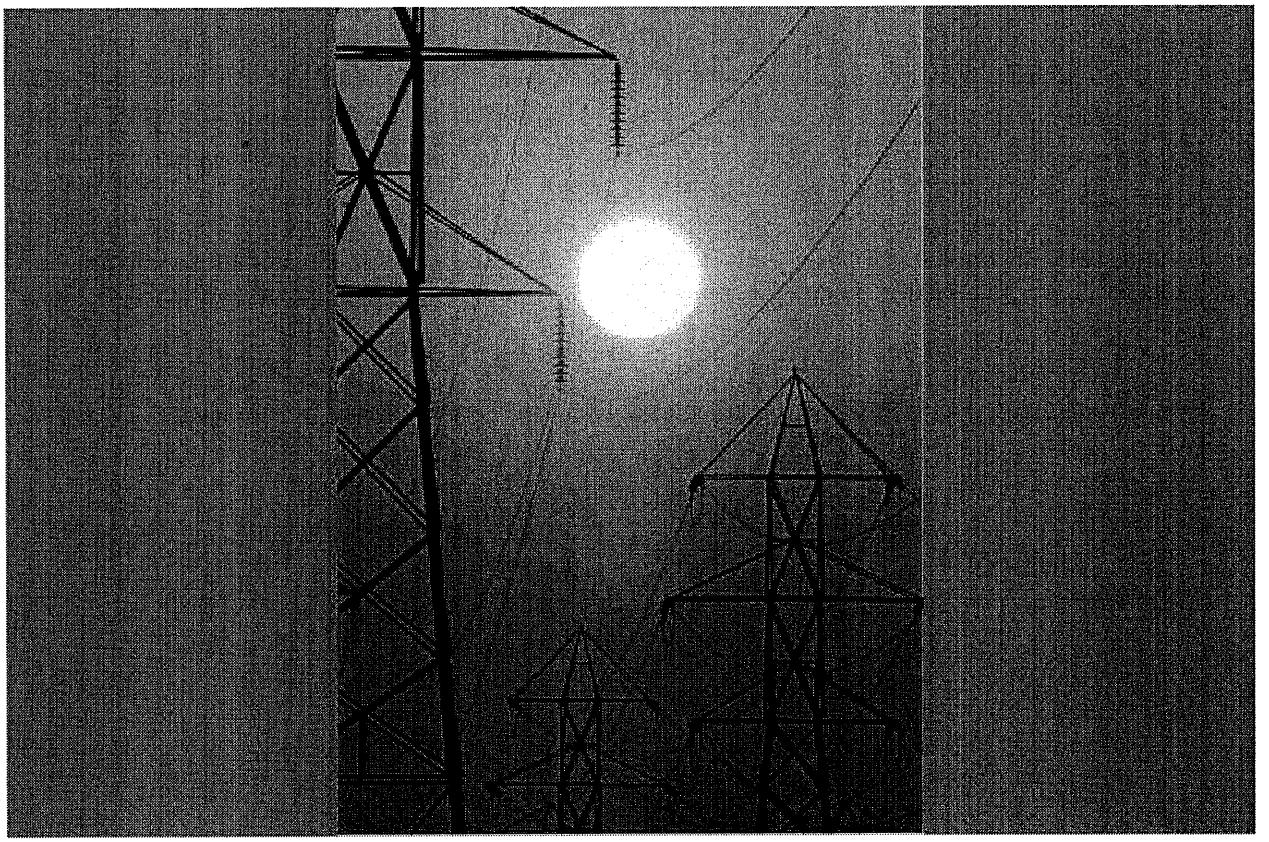

FILE PHOTO

The wholesale price of electricity yesterday skyrocketed to nearly $800 per megawatt-hour, about 20 times the usual cost.

By Dan Gearino

The Columbus Dispatch Wednesday July 18, 2012 7:31 AM

Stifling heat yesterday led to the highest electricity demand of the year in the region that includes Ohio.

To meet the needs of power consumers in the Midwest and along the East Coast, utilities fired up their reserve power plants. The wholesale price of

electricity skyrocketed to nearly $800 per megawatt-hour, about 20 times the usual cost but a phenomenon normal during high-demand days.

The heat wave also served as a test for a network of office buildings and factories that have agreed to reduce their electricity use during times of peak demand. The businesses get a monthly check for participating, and yesterday was one of the rare times that energy managers issued an order for members to power down.

Capital City Ice, based on the West Side, is one of the participants in that program. The company reduced its use by about half in response to the order, which saves about 2 megawatts that can be used by others. A megawatt is enough power to serve about 1,000 households.

"It's a new one for us," said Gregg Steele, general manager of the ice company.

He had run several drills to prepare for this kind of power reduction, but yesterday was the first time he did it for real. Capital City's freezers are insulated well enough that they can go days without power if needed, although this shutdown lasted only four hours.

The people who oversee the region's electricity system say they have plenty of power to meet demand. If they get close to exceeding capacity, they will issue a call for all businesses and households to reduce energy use.

"It's something we are watching closely, but we're not at a point where we've had to take any steps that would impact the public," said Paula DuPont-Kidd, spokeswoman for **PJM Interconnection**, the company that manages the flow of power in a 13-state territory that runs from Illinois to Maryland, including Ohio.

Demand in PJM's territory hit a peak of 155,453 megawatts yesterday, the highest of the year.

In May, PJM officials estimated that the daily peak for the summer would be about 154,000 megawatts. That means the region already has exceeded what was supposed to be the high for the year, with many weeks left in the summer.

The system's all-time high was nearly 164,000 megawatts in August 2006. Since then, the borders of the territory have changed; the record high has

been adjusted to include what demand would have been with the current boundaries.

Demand is tied to the temperature and the state of the economy. The recession led to a drop in electricity use by businesses, which meant less stress on the power system during hot days, and use has been slow to recover.

Columbus' high temperature was 98 yesterday. The region's largest utility, American Electric Power, expected its demand to hit a daily peak of 21,025 megawatts for a multistate territory that includes Ohio. That would fall just short of the high this summer of 21,036 megawatts, recorded on June 28. It is well short of the all-time high, 22,413 megawatts in August 2007.

To meet demand, AEP is using every power plant it has available, said spokeswoman Melissa McHenry. That includes several coal-fired plants that are scheduled to be shut down over the next few years. AEP executives have said the shutdowns are planned because of environmental regulations, and they have warned that the system might not have enough capacity to meet needs during future heat waves.

One of the only AEP plants not in action was the Picway plant near the Franklin-Pickaway county line; it is shut down for maintenance.

The volatility seen in the surge in wholesale electricity prices is a normal part of summer pricing. Some natural-gas-fired power plants operate only during these periods, raking in enough income to cover costs for the year.

In recent years, PJM has begun using something called "demand response" to increase the amount of power available. Companies sign contracts that say they agree to reduce their electricity use during periods of high demand. In exchange, the companies receive a monthly check year -round.

Yesterday was the first time in at least five years that PJM issued a call for demand-response participants to power down in central Ohio, according to EnerNoc, one of several companies that manage the program.

"Today's dispatch is very, very uncommon," Todd Krause, who oversees EnerNoc's work in the region that includes central Ohio, said yesterday.

dgearino@dispatch.com