BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Proposed Operating Permit	)
Issued by the	)
Commonwealth of Kentucky, Division of Air Quality,	) Permit No. V-02-001
To	)
Thoroughbred Generating Company, L.L.C.	)
For the Operation of	)
Thoroughbred Generating Station	)

SUPPLEMENT TO
PETITION FOR OBJECTION TO ISSUANCE OF OPERATING PERMIT FOR THORUGHBRED GENERATING STATION

I. Introduction and Background

Petitioners Sierra Club, Natural Resources Defense Council, Valley Watch, Inc., National Parks Conservation Association, Kentucky Environmental Foundation, Ohio Valley Environmental Coalition, Elizabeth Crowe and Hannah Crowe submitted a petition on January 24, 2003 to the Administrator of the United States Environmental Protection Agency ("EPA") seeking an objection to Permit V-02-001 issued by the Kentucky Division of Air Quality to Thoroughbred Generating Company, L.L.C. for the Thoroughbred Generating Station ("Thoroughbred"). EPA has yet to respond to this Petition. Petitioners are now supplementing their Petition to raise an additional ground for objection to Thoroughbred's permit. The ground for this objection arose after the public comment period. Therefore, pursuant to 42 U.S.C. § 7661d(b)(2), Petitioners may raise this issue even though the issue was not included in the comments submitted during the public comment period.

The supplemental issue is that EPA should object to the Permit because more than 18 months have passed since the Kentucky Division of Air Quality issued the Permit and Thoroughbred Generating Company has not commenced construction on Thoroughbred. The final permit was issued in October, 2002, and the Kentucky Division of Air Quality has now extended Thoroughbred's PSD permit for the fourth time, for a total of nearly five years worth of extensions. Thus, as discussed below, all of the New Source Review provisions of the permit are no longer valid. See Condition G(d)(2); 401 KAR 52:020 § 3(2)(2002); 401 KAR 51:017 § 17(2)(2002). In addition more than 30 months have passed since the Kentucky Division of Air Quality issued the case-by-case MACT determine. Thus, that determination is also no longer valid. 40 C.F.R. § 63.43(g)(4).

The fact that the Kentucky Division of Air Quality has granted four extensions to the 18 month deadline does not prohibit an objection. To begin with, the extensions cannot apply to the case-by-case MACT determination as the MACT regulations only allows one 12 month extension and that time period has already passed. See 40 C.F.R. § 63.43(g)(4). In addition, the Kentucky Division of Air Quality's fourth and most recent extension was arbitrary and capricious and it is incumbent upon EPA to object to arbitrary and capricious state agency NSR permitting actions. See generally Alaska DEC v. EPA, 540 U.S. 461, 491 (2004). The Kentucky Division of Air Quality granted all four of the extensions, which grant a total extension of just shy of five years, for a single reason; the on-going legal challenges to the Thoroughbred permit. See Ex. 1 – 4. The mere existence of litigation cannot justify the ongoing extension of a PSD permit and the failure to reevaluate BACT, reassess increment consumption and ambient air quality impacts, examine changing regulatory requirements, and provide meaningful opportunities for public participation. The administrative and judicial appeal of a PSD permit are rights conferred on the public by the Clean Air Act, and exercise of these rights cannot excuse a permit applicant from its obligation to comply with the otherwise applicable requirements of the Act and its implementing regulations.[1] A conclusion to the contrary would amount to adoption of an automatic and unlimited permit extension anytime a member of the public appeals a permit – clearly an untenable and irrational outcome that would fundamentally jeopardize the integrity of the PSD program.

II. Discussion and Argument

The Clean Air Act and EPA regulations disallow the construction of a new or modified major source that does not have a valid PSD permit, and limit the validity of such permits to a period of eighteen months from the date they are issued. Firstly, the Act states:

> No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless – (1) a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part. . . .

[1] Other permittees, in fact, have constructed their source while permit challenges have been pending. For example, East Kentucky Power Cooperative constructed its coal-fired unit, Spurlock 4, while members of the public were challenging its permit. There is no rational reason to give Thoroughbred an unfair advantage of a stale BACT determination and the reservation of increment solely because Thoroughbred claims its business model is less robust than other business models.

42 U.S.C. § 7475(a). EPA regulations provide that a permit becomes invalid if construction is not commenced within 18 months after permit approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. 40 C.F.R. § 52.21(r)(2). This expiration is automatic and does not rely on any action by any agency to take effect.[2]

This limitation on the ongoing validity of PSD permits is directly related to one of the fundamental purposes of the PSD permitting program – to require that all new or modified major sources in attainment areas employ state of the art measures for emissions control. By necessity, an evaluation of what is "state-of-the-art" requires an analysis that is sufficiently up to date to reflect the latest technologic advancements, production processes and available methods, systems, and techniques for reducing emissions, and to accurately characterize the impact of a proposed source on ambient pollutant concentrations, relevant pollutant increments, and other air quality values. The repeated extension of a PSD permit approval far beyond the initial period of approval, without thorough and detailed analysis of each element of the PSD analysis, and without a meaningful opportunity for public participation, is antithetical to the fundamental role of the PSD permitting process.

While EPA's regulations provide that the Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified, EPA has made clear that any significant extension of a PSD permit must be accompanied by a revisited BACT analysis and air quality impacts analysis to ensure that the permit incorporates

[2] As the Southern District of Illinois has observed "Owners or operators seeking to construct major emitting facilities run the risk that if a PSD permit expires, they will then be subject to stricter BACT standards when applying for a new permit because of pollution control developments since their original permits were issued." Sierra Club v. Franklin County Power, Case No. 05-cv-4095-JPG (S.D.Ill. Oct.17, 2006).

appropriate emission limitations and other permit conditions given the passage of time since initial permit issuance. As far back as 1988, EPA has recognized that permit extensions should be granted only under *carefully prescribed* conditions, otherwise abusive use of permit extensions might threaten to undermine the integrity of the PSD program. In particular, EPA Region IX guidance explains:

> The intent of this policy is to grant a permit extension of the 18-month deadline to any good faith application, provided the following requirements are met. If these requirements are not met or if the extension request is denied, the permit will become invalid after its expiration date. The applicant, however, may choose to file a project application for consideration as a new permit. In general, the import of this policy is to ensure that the proposed permit meets the current EPA requirements, and that the public is kept apprised of the proposed action (i.e. through the 30-day public comment period).
>
> **I. ADMINISTRATIVE REQUIREMENTS**
>
> **(1) Submittal**
>
> An extension request must be submitted and received by EPA Region IX prior to the expiration date of the permit.
>
> **(2) Justification**
>
> The extension request must include an acceptable justification why the commencement of construction did not commence as scheduled. The request must also include a revised construction schedule which assures that construction will be initiated during the extension period and that construction will be continuous.
>
> **(3) Certification**
>
> The extension request must be signed by a responsible representative of the company proposing the project.
>
> **II. TECHNICAL REQUIREMENTS**
>
> **(1) BACT Analysis**
>
> A BACT reanalysis is required in all permit extension requests, as in an application for a new PSD permit. It should also be noted that, according to a recent EPA policy, any new BACT determination being prescribed for any

regulated pollutant must also consider the impact of the proposed BACT on the emissions of unregulated or toxic pollutants.

(2) Additional PSD Review Requirement

A reanalysis of the PSD increment consumption and air quality impacts is required. Interim source growth in the area may have occurred and caused significant degradation of air quality. Therefore, the review agency is responsible for ensuring that the source requesting an extension would not cause or contribute to a PSD increment or NAAQS exceedances.

* * *

III. PROCEDURAL ISSUES

(1) Duration of Extensions

Due to concerns of growth rights and public participation, EPA may limit an extension to 12 months, or less, from the initial date the permit was to expire. This allows for an extension, if necessary, while ensuring that impacted States, Districts and the public have control of their own air resources and growth rights and that state-of-the-art BACT will be employed.

(2) Public Comment

EPA will require the same public comment procedure for extension requests as for permit modifications including a 30-day public comment period. Requests for public hearings and petitions for permit appeals shall follow the applicable procedures of 40 C.F.R. Part 124.

Memorandum, EPA Region IX Policy on PSD Permit Extension (Sept. 8, 1988) attached as Ex. 7. EPA has consistently followed this framework, explaining in response to an extension request in 2002, that:

> Pursuant to the federal PSD regulations at 40 CFR 52.21(r)(2), a PSD permit approval becomes invalid if construction is not commenced within 18 months after receipt of such approval. However, EPA may exercise its discretion to extend the 18 month period "upon a satisfactory showing that an extension is justified." . . . [A permit applicant] must also demonstrate that there is a reasonable likelihood that the project will go forward and construction will commence in the next 18 months.[3]

[3] Letter from Steven C. Riva, Chief Permitting Section to Mr. Hector M. Alejandro, Director for Planning and Environmental Protection, Puerto Rico Electric and Power Authority (PREPA) (June 10, 2002) attached as Ex. 14.

In addition, EPA explained in this letter that the permit applicant would need to specifically reevaluate BACT, demonstrate that the increment and air quality analysis had not changed, address "any new requirements that might now apply" due to the passage of time, and subject the extension proposal to public notice and comment.[4] Thoroughbred Generating Company's four requests for extension have not complied with any of these requirements. See Ex. 8 – 11. It is important to recall that Thoroughbred consumed 99.6% of the available Class I SO2 increment in Mammoth Cave National Park. See Ex. 12 at 4th page (4.98 ug/m^3 / 5 ug/m^3 = 0.996). Thus, a slight change in emissions from other sources could cause Thoroughbred to violate the increment.

The granting of four permit extensions that extend the validity of a PSD permit for nearly five years is unprecedented. The inappropriateness of these multiple extensions, and in particular the fourth and most recent extension, are plainly evident. These extensions, without robust scrutiny of the permit conditions and meaningful opportunity for public participation, fly in the face the technology forcing nature of PSD, allowing the permit applicant to move forward with a project with an outdated technology analysis. See Alabama Power v. EPA, 636 F.2d 323, 372 (DC Cir. 1979)(PSD is technology forcing). It is also contrary to the first-come, first-served nature of increments as it allows extended "reservation" of available increment. See Hancock County v. EPA, 1984 U.S. App. LEXIS 14024 (6th Cir. August 14, 1984) at *2 - *3(increment should be on a first-come, first-served basis).

Moreover, since 2002 – when the PSD permit was first issued – there have been many changes that are likely to affect the nature and stringency of the permit conditions

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[4] Id. Appropriately, states have continued to follow this approach recently as well, including the requirement for new BACT analysis, increment and air quality assessment, and public notice and comment; see e.g. http://www.dec.ny.gov/enb2006/20060322/not4.html.

included in Thoroughbred's permit. Indeed, these changes reflect precisely the types of changing circumstances that EPA has previously recognized as the basis for requiring close scrutiny of PSD permit extensions.

For example, the New Source Performance Standard for electric steam generating units has been revised to be more stringent. 71 Fed. Reg. 9865 (Feb 27 2006). This should re-define the BACT floor for Thoroughbred. Muhlenberg County, where Thoroughbred is proposed to be built, has been designed as attainment for the 8-hour ozone standard and the 1997 PM2.5 NAAQS, thus requiring different BACT and ambient impacts analysis. See 69 Fed. Reg. 23857 (April 30, 2004) (8-hour ozone attainment designation); 70 Fed. Reg. 943 (Jan. 5, 2005)(1997 PM2.5 NAAQS attainment designation). In addition, with respect to specific PSD pollutants, BACT for coal-fired power has advanced since 2002. For example, the Kentucky Division of Air Quality issued a permit for the Trimble 2 coal-fired power plant with an emission limit of approximately 0.05 lb/MMBtu NOx on a 24 hour averaging time basis. While not a BACT limit, this should define a key input for a BACT analysis. In addition, there is emission data for multiple ozone seasons including ozone seasons with smaller NOx SIP Call credit pools because of the reduction or deletion of supplemental compliance credits, thus creating a stronger regulatory driver for lower NOx emissions. So, for example, Louisville Gas & Electric's Ghent coal-fired power plant achieved an ozone season emission rate of 0.027 lb/MMBtu at Unit 3 and Unit 4. This is less than half of Thoroughbred's current NOx BACT limit. Other PSD permits and permit applications have also emerged with specific BACT emission limitations that are lower than the limits included in Thoroughbred's 2002 permit. Finally, the Supreme Court decided

Massachusetts v. EPA, No. 05.1120 (April 2, 2007), making carbon dioxide (and other greenhouse gases) subject to regulation under the Clean Air Act and therefore subject to BACT.

Much will change before or shortly after March 30, 2009 when the Kentucky Division of Air Quality claims the current construction deadline will expire. EPA will revise the New Source Performance Standards for coal preparation plants and non-metallic mineral processing plant on or before April 16, 2009, which may again redefine the BACT floor for the limestone and coal processing and handling equipment permitted at Thoroughbred. EPA will presumably finalize the PM2.5 implement regulations that it recently proposed. See 72 Fed. Reg. 54111 (Sept. 21, 2007). In addition, EPA lowered the PM2.5 24 hour NAAQS last year. See 71 Fed. Reg. 61143 (Oct. 17, 2006). Presumably, this will create more stringent requirements before March 30, 2009. In addition, BACT will continue to advance. For example, as explained above, there are coal-fired units that have shown that NOx emission rates much lower than current BACT limits are achievable. Permitting agencies, either on their own or through litigation, will eventually catch up and incorporate current information into their BACT determinations. Moreover, according to EPA, the agency will issue regulations addressing greenhouse gas emissions from mobile sources and establishing requirements for consideration of greenhouse gas emissions under the new source review program (including PSD) – thus creating specific new regulatory obligations for significant new sources of CO_2 emissions like the proposed Thoroughbred Generating Station.

Significantly, it appears that Thoroughbred Generating Company has no plans to actually construct the Thoroughbred plant anytime in the near future, despite the fact that a demonstration of intent and likelihood of actual construction during the extension period is a prerequisite for PSD permit extensions (one that has obviously not been applied in this case given the three previous permit extensions). Peabody, which is Thoroughbred Generating Company's parent company, recently gave a presentation at the Lehman Brothers CEO Energy/Power Conference. See Ex. 5. Peabody did not list Thoroughbred as being under constructed in the 2010 – 2012 time frame even though it listed Thoroughbred's sister facility, Prairie State. See Ex. 5 at 16. Peabody did not even list Thoroughbred as highly probably to be constructed after 2012. Id. EPA should not allow Thoroughbred to reserve its permit on a speculative basis that construction may commence some time after 2012, and allow it to do so without the thorough and probing new analysis that is appropriate when a permit application expires.

Finally, Kentucky's Division of Air Quality granted its four extensions of the commence construction deadline without any public notice and opportunity for comment. This was arbitrary and capricious and otherwise not in accordance with law as it goes against the fundament purpose of the Prevention of Significant Deterioration program which is to assure that decisions are made only after opportunities for informed public participation in the decision making process. See 42 U.S.C. § 7470(5). EPA has taken the position that granting extensions of the commence construction deadline requires public notice and comment. See Ex. 6 at page 8. EPA has applied this policy of requiring public notice consistently as have state agencies. See e.g. Ex. 13 at 2; Ex. 14 at 3; Ex. 15 at 3-4. There is no rationale reason for EPA to depart from that position for the benefit of Peabody.

III. Conclusion

For the reasons outline above, allowing Thoroughbred to commence construction between now and March 30, 2009, under its current outdated permit would be arbitrary and capricious. On this basis, and based on the issues set forth in the original Petition, Petitioners respectfully request that the Administrator object to the Thoroughbred permit.

Respectfully submitted,

Bruce Nilles, Director
National Coal Campaign
Sierra Club
122 West Washington Ave, Suite 830
Madison, WI 53703
p:608.257.4994
f: 608.257.3513
e: bruce.nilles@sierraclub.org

For Petitioner Sierra Club

Patrice L. Simms
Natural Resources Defense Council
1200 New York Ave. NW, Suite 400
Washington, DC 20005
Tel: 202 289-2437
Fax: 202 289-1060
psimms@nrdc.org

For Petitioner Natural Resources Defense Council

John Blair
Valley Watch, Inc.
800 Adams Avenue
Evansville, IN 47713
812-464-5663

For Petitioner Valley Watch Inc.

Mark Wenzler
Director, Clean Air Program
National Parks Conservation Association
1300 19th Street NW, Suite 300
Washington DC 20036
202-454-3335 (phone)
mwenzler@npca.org

For Petitioner National Parks Conservation Association

Dianne Bady with permission

Dianne Bady
OVEC co-director
PO Box 6753
Huntington, WV 25773-6753.
Phone: 304-522-0246

For Petitioner Ohio Valley Environmental Coalition

Elizabeth Crowe
KEF
128 Main St.
Berea, KY 40403ß
(859) 986-0868
elizabeth@cwwg.org

For Petitioners Kentucky Environmental Foundation, Elizabeth Crowe and Hannah Crowe

Dated: October 18, 2007

Cc:

John Lyons
Director
Kentucky Division of Air Quality
Department for Environmental Protection
803 Schenkel Lane
Frankfort, Kentucky 40601-1403

Teresa Hill
Secretary
Office of the Secretary
Environment and Public Protection Cabinet
Capital Plaza Tower
Frankfort, KY 40601

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street, Suite 781
St. Louis, Missouri 63101

Harry Johnson, III
Kevin Finto
Hunton & Williams
Riverfront Plaza, East Tower
951 East Byrd Street
Richmond, Virginia 23219-4074
Counsel for Thoroughbred

EXHIBIT 1

ERNIE FLETCHER
GOVERNOR

LAJUANA S. WILCHER
SECRETARY

COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION FOR AIR QUALITY
803 SCHENKEL LN
FRANKFORT, KY 40601-1403

January 26, 2004

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street, Suite 781
St. Louis, Missouri 63101

Re: Request For Construction Extension
Facility ID#: 21-177-00077

Dear Ms. Tickner:

This comes in response to our January 21, 2004 telephone conversation and your letter of the same date requesting extension of commencement of construction of the Thoroughbred Generating Station. Construction authorization was originally granted by the October 11, 2002 issuance of permit number V-02-001.

Given the circumstances surrounding the litigation and the length of time projected to complete the proceedings, the Division is in agreement with your assessment and the justification presented for your request. Since the litigation will not conclude until after original construction authority expires on April 10, 2004, Thoroughbred Generating Station is hereby granted an additional eighteen (18) months from that date to commence construction. The additional eighteen (18) month period will expire on October 9, 2005.

Please do not hesitate to call if you have any questions regarding this transmittal.

Sincerely,

John S. Lyons

John S. Lyons
Director

JSL/cam

c: Owensboro Regional Office
Jack Bates, Office of Legal Services
Susan Green, Office of Legal Services

RECEIVED

FEB 0 2 2004

DIANNA TICKNER

EXHIBIT 2

Ernie Fletcher
Governor

LaJuana S. Wilcher
Secretary

Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601-1403
www.air.ky.gov

September 2, 2005

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street, Suite 781
St. Louis, Missouri 63101

RE: Request For Construction Extension
Facility ID # 21-177-00077

Dear Ms. Tickner:

This is in response to your July 27, 2005 letter requesting an additional 18-month extension to commence construction of the Thoroughbred Generating Station in Muhlenberg County, Kentucky.

Construction authorization was originally granted by the issuance of permit number V-02-001 on October 11, 2002. In January 2004, you requested and were granted the first 18-month construction extension due to the uncertainty and length of time involving litigation of the permit. You state in your most recent request that the uncertainty still remains with the outcome of the litigation, now that the Hearing Officer's report has been issued and the timeframe for a ruling by the Secretary of the Environmental and Public Protection Cabinet is unknown.

With the possibility of this ruling coming after your current construction authority, which expires on October 9, 2005, the Division is hereby granting your request for an extension. Thoroughbred Generating Company shall begin construction as soon as possible after final disposition of the permit but no later than April 9, 2007.

If you have any questions regarding this transmittal, contact me at (502)573-3382.

Sincerely,

John S. Lyons
Director

JSL/cam
c: Facility File
Owensboro Regional Office

EXHIBIT 3

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Ernie Fletcher
Governor

Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601-1403

Teresa J. Hill
Secretary

February 5, 2007

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street, Suite 781
St. Louis, Missouri 63101

RE: Request For Construction Extension
Agency Interest#: 35762
Facility ID#: 21-177-00077

Dear Ms. Tickner:

This is in response to your December 4, 2006 letter requesting a third extension to commence construction of the Thoroughbred Generating Station in Muhlenberg County, Kentucky. Previous construction authorization extensions were granted in January 2004 and September 2005. Both of these extensions were granted due to the on-going litigation of permit V-02-001 issued on October 11, 2002. TGS' construction authority is good until April 9, 2007.

In your most recent request, you again reiterate that uncertainty still remains with the outcome of the litigation due to the petitioners appeal in Franklin Circuit Court. TGS claims that "efficient, reliable and long term commercial arrangements" cannot be secured without knowing the ultimate outcome of the litigation. The Cabinet acknowledges that oral arguments have concluded in that matter and a decision of the court is still pending.

The Cabinet also acknowledges that the Franklin Circuit Court is not the only venue where petitioners are actively pursuing action against TGS, and that a ruling in that Circuit Court would not necessarily provide a clear path for TGS to begin construction. Given that consideration, the Cabinet will agree to extend the construction authority of permit V-02-001 until September 30, 2007.

Let me also take this opportunity to remind you that permit V-02-001 expires on October 11, 2007. As required by 401 KAR 52:020, Section 12(4), a source must submit a renewal application six (6) months prior to expiration of the permit. Therefore, a renewal application is due to the Division for Air Quality on April 11, 2007. TGS will receive another courtesy reminder of that obligation from the Division of Compliance Assistance on or about February 28, 2007.

If you have any questions regarding this transmittal, contact me at (502) 573-3382.

Sincerely,

John S. Lyons
Director

JSL/cam

c: Facility File
Owensboro Regional Office

EXHIBIT 4

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Ernie Fletcher
Governor

Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601-1403
September 7, 2007

Teresa J. Hill
Secretary

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street, Suite 781
St. Louis, Missouri 63101

RE: Request For Construction Extension
Agency Interest #: 35762
Facility ID #: 21-177-00077

Dear Ms. Tickner:

This is in response to your September 6, 2007 letter requesting a fourth extension to commence construction of the Thoroughbred Generating Station (TGS) in Muhlenberg County, Kentucky. Previous construction authorization extensions were granted in January 2004; September 2005 and February 2007. These extensions were granted due to the on-going litigation of permit number V-02-001 issued on October 11, 2002. TGS' construction authority is good until September 30, 2007.

In your most recent request, you again reiterate that uncertainty still remains with the outcome of the litigation due to the recent decision from Franklin Circuit Court (Civil Action No. 06-CI-00640) which ordered a remand of the permit. The Environmental and Public Protection Cabinet (Cabinet) acknowledges it has appealed the Franklin Circuit Court Order to the Court of Appeals and that Thoroughbred Generating, LLC (TGC) has also filed its own motion for appeal in the case. TGS claims that it "cannot complete the long-term commercial and financial arrangements required to commence construction" without knowing the ultimate outcome of the litigation.

The Cabinet acknowledges that the ongoing litigation is beyond TGC's control and that final resolution of the litigation may still be many months away. Given the considerations of the issues surrounding this permit the Cabinet will agree to extend the construction authority of permit V-02-001 until March 30, 2009.

If you have any questions regarding this transmittal, please contact me at 502-573-3382.

Sincerely,

John S. Lyons
Director

JSL/cam
c: Facility File
Owensboro Regional Office

EXHIBIT 5

Peabody

Lehman Brothers CEO Energy / Power Conference

September 6, 2007

Peabody Energy
NYSE: BTU

Statement on Forward-Looking Information

Some of the following information contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended, and is intended to come within the safe-harbor protection provided by those sections.

Our forward-looking statements are based on numerous assumptions that we believe are reasonable, but they are open to a wide range of uncertainties and business risks that may cause actual results to differ materially from expectations as of July 24, 2007. These factors are difficult to accurately predict and may be beyond the control of the company. These risks include, but are not limited to: the outcome of commercial negotiations involving sales contracts or other transactions; customer performance and credit risk; supplier performance, and the availability and cost of key equipment and commodities; availability and costs of transportation; geologic, equipment and operational risks associated with mining; our ability to replace coal reserves; labor availability and relations; the effects of mergers, acquisitions and divestitures; legislative and regulatory developments; the outcome of pending or future litigation; coal and power market conditions; weather patterns affecting energy demand; availability and costs of competing energy resources; worldwide economic and political conditions; global currency exchange and interest rate fluctuation; wars and acts of terrorism or sabotage; political risks, including expropriation; and other risks detailed in the company's reports filed with the Securities and Exchange Commission. The use of "Peabody," "the company," and "our" relate to Peabody, its subsidiaries and majority-owned affiliates.

EBITDA or Adjusted EBITDA is defined as income from continuing operations before deducting net interest expense, early debt extinguishment costs, income taxes, minority interests, asset retirement obligation expense & depletion, depreciation & amortization. For a reconciliation of EBITDA, a non-GAAP measure, to income from operations, the most comparable GAAP measure, please see PeabodyEnergy.com and the company's documents filed with the SEC.

Peabody

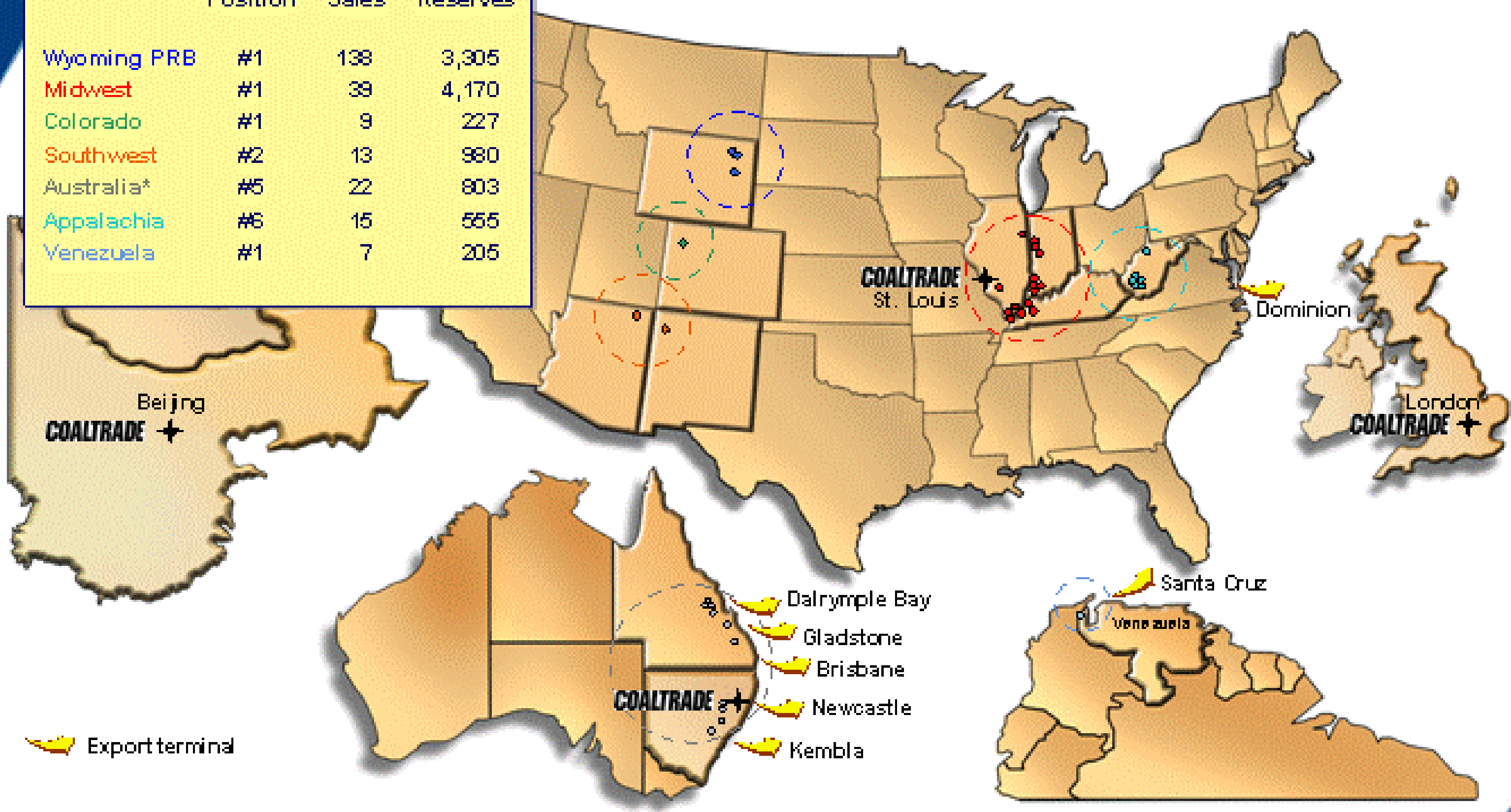
BTU: The Only Global Pure-Play Coal Investment

World's Largest Private-Sector Coal Company

- Excellent leverage to rising prices
- Global expansion into growing, high-margin markets
- Levered to China and India growth
- Industry-best 10+ billion ton reserve base
- Transforming global operating platform and earnings base
- Secure and growing demand from new generation and Btu Conversion

World's Largest Coal Company: Peabody's Base Portfolio of Operations

	Market Position	2006 Sales	2006 Reserves
Wyoming PRB	#1	138	3,305
Midwest	#1	39	4,170
Colorado	#1	9	227
Southwest	#2	13	980
Australia*	#5	22	803
Appalachia	#6	15	555
Venezuela	#1	7	205



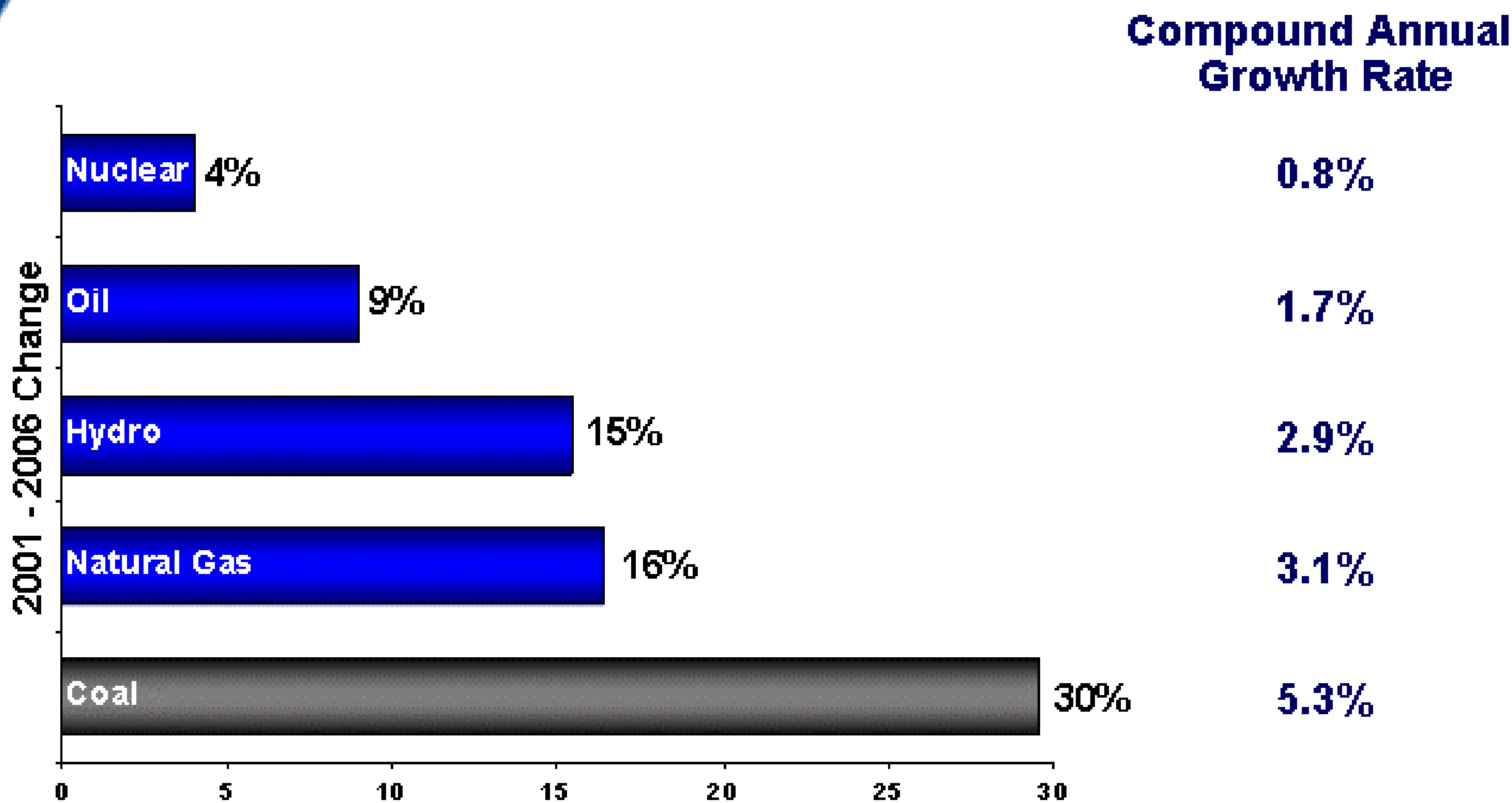
* Market position and sales pro forma 2007 including Excel mines under development.

2006 sales volumes in millions of short tons. Venezuela sales volume for Paso Diablo Mine, of which Peabody owns a 25.5% interest. Reserves based on 2006 proven and probable for areas shown. Source: Peabody analysis & industry reports.

GLOBAL MARKETS AND PEABODY POSITION

Global Coal Use Soars 30%, or 1.4 Billion Tons, in Five Years

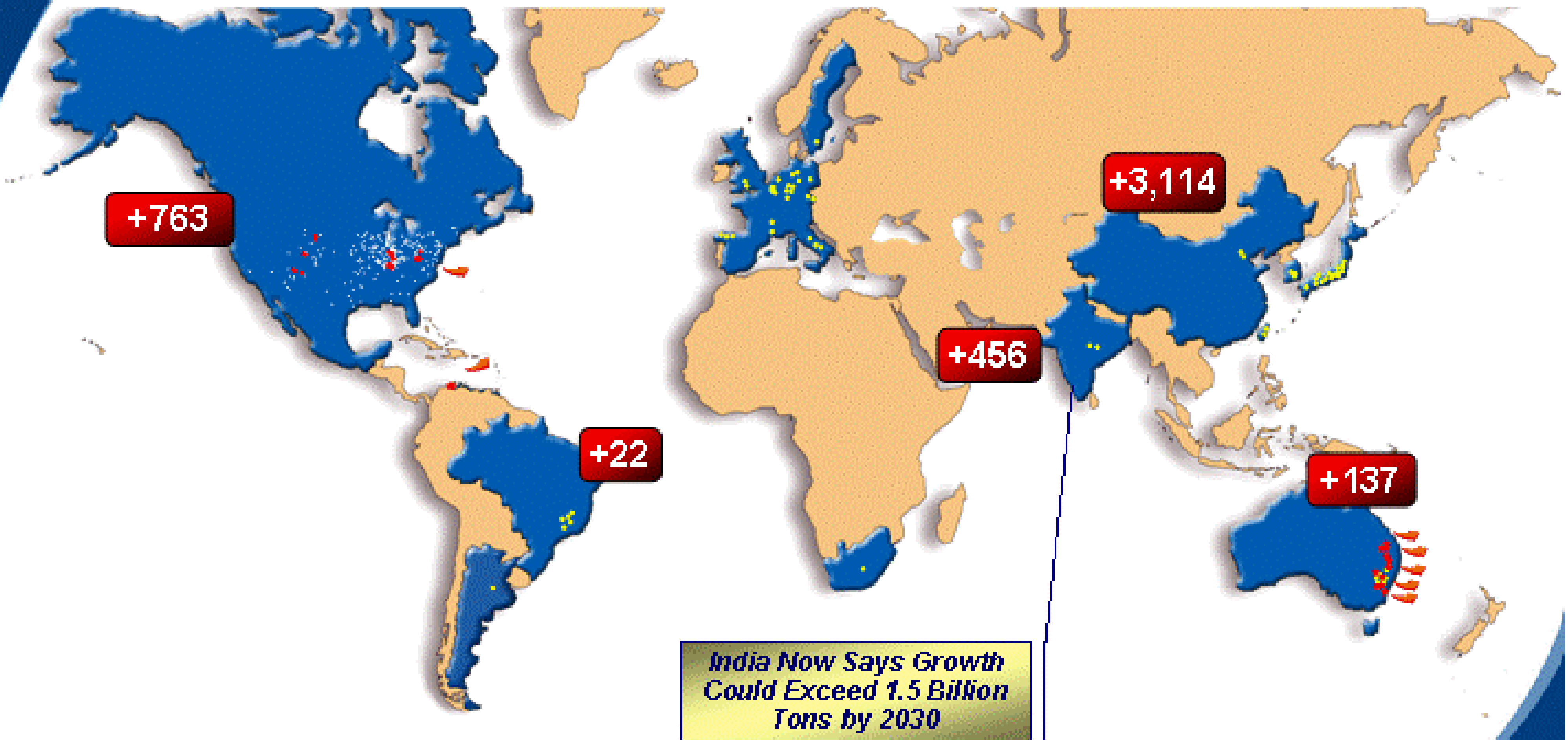
Five-Year Change in Global Energy Consumption



Source: BP Statistical Review of World Energy, June 2007.

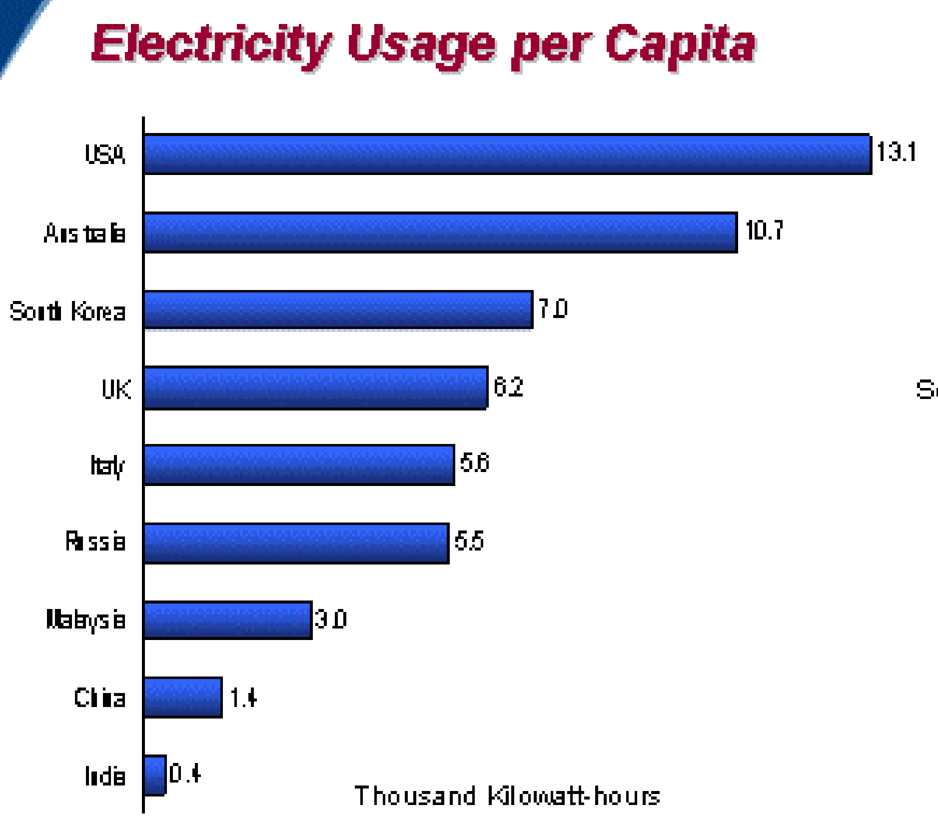
China, U.S. and India Represent Vast Majority of Global Coal Growth

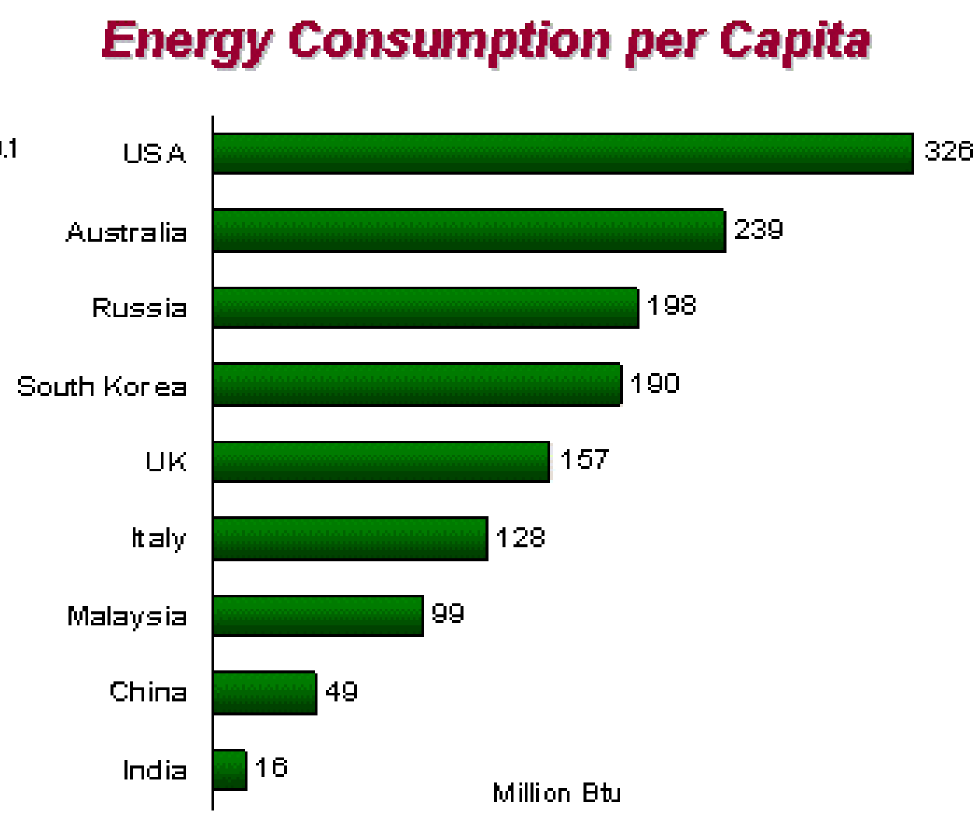
Long-Term Coal Demand Forecasts Continue to Rise



Amounts in million short tons.
Source: U.S. Department of Energy, Energy Information Administration, International Energy Outlook 2006.
Projected Australia export flow for 2004-2030.

China and India Driving Global Demand Growth for Energy





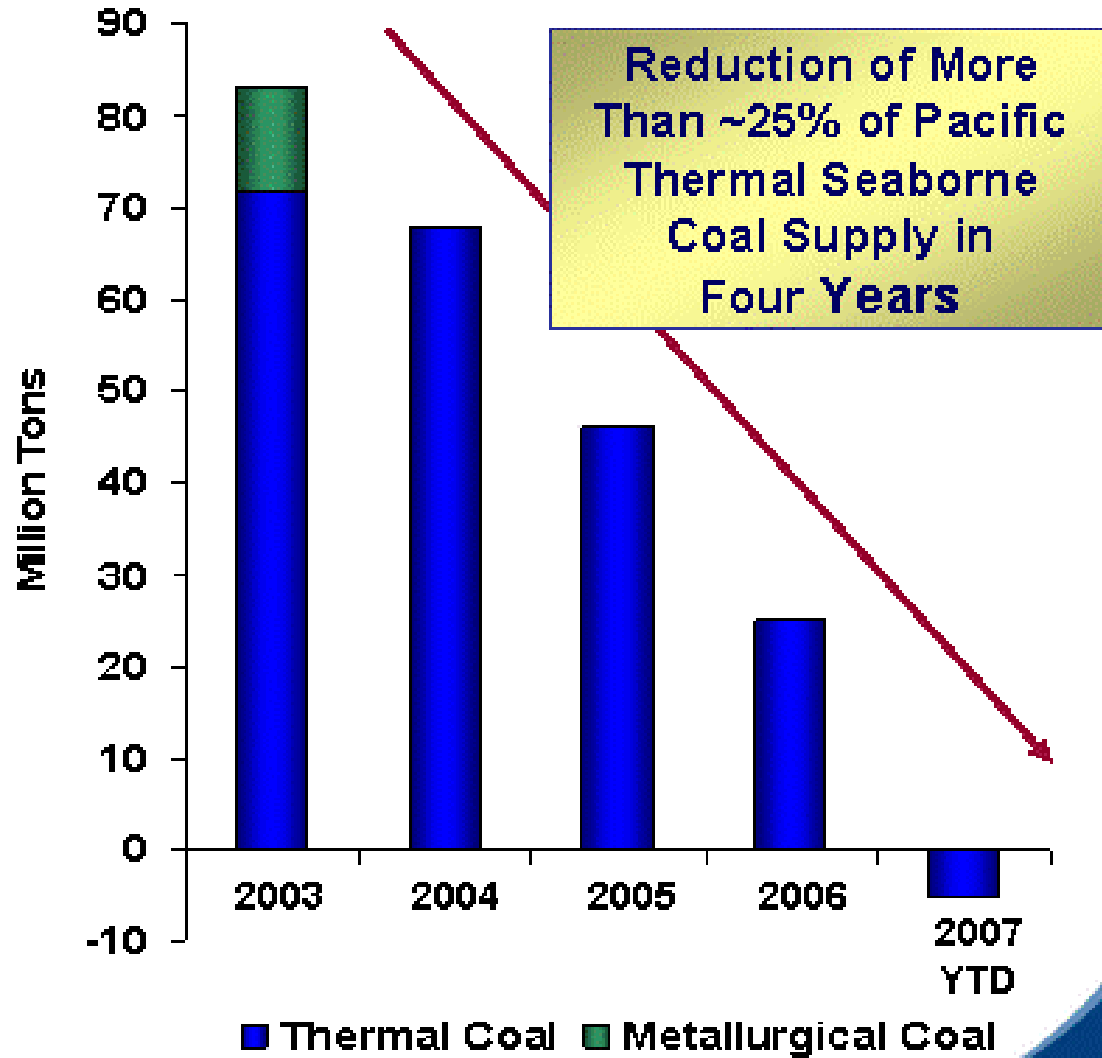
Per-Capita Electricity Use Just 1/10th (China) and 1/30th (India) the U.S. Level

Source: International Energy Agency.

China's New Net Importer Status Creates Fundamental Shift in Seaborne Markets

Pacific and Atlantic Markets Continue to Tighten

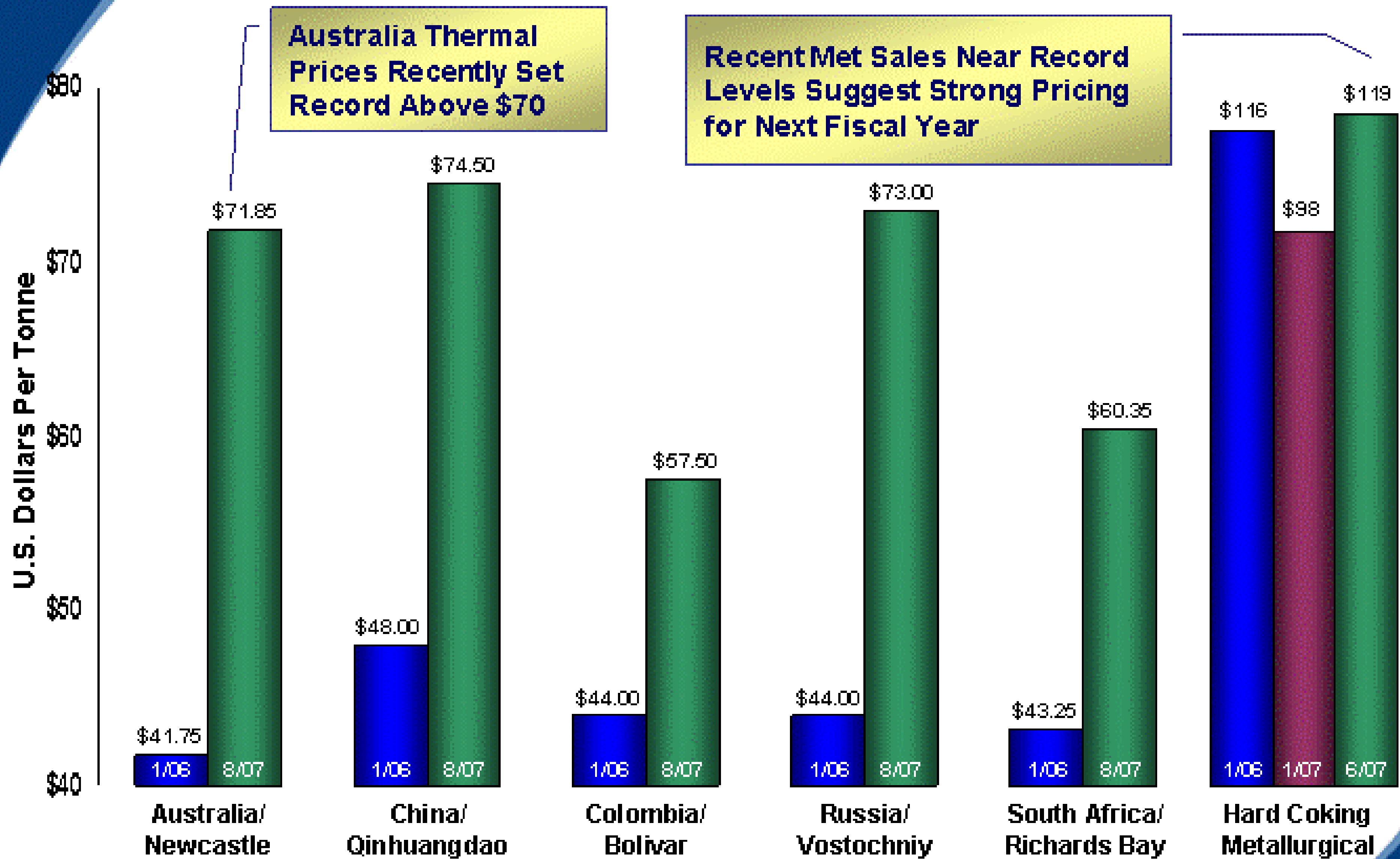
- China and India continue to increase coal imports
- Indonesia's thermal exports dampened by extended rainy season
- Russia now predicting decline in exports to serve domestic needs
- Australia exports increase just 5.4% YTD… well below plan



Amounts in million short tons.
Source: Industry reports and Peabody analysis.

Peabody

International Coal Prices Show Increases Across the Board

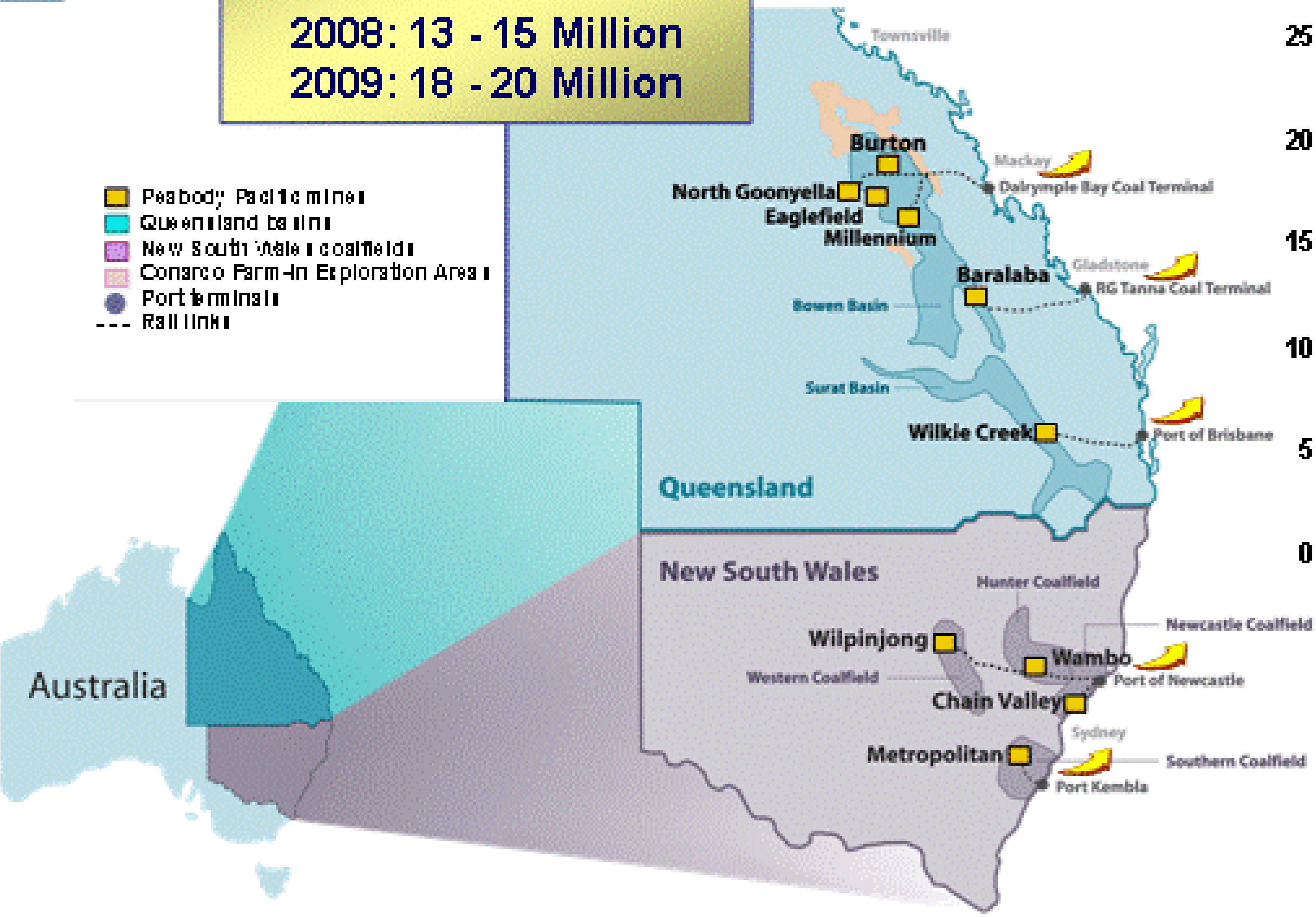


Source: McCloskey's Coal Report; Industry Reports.

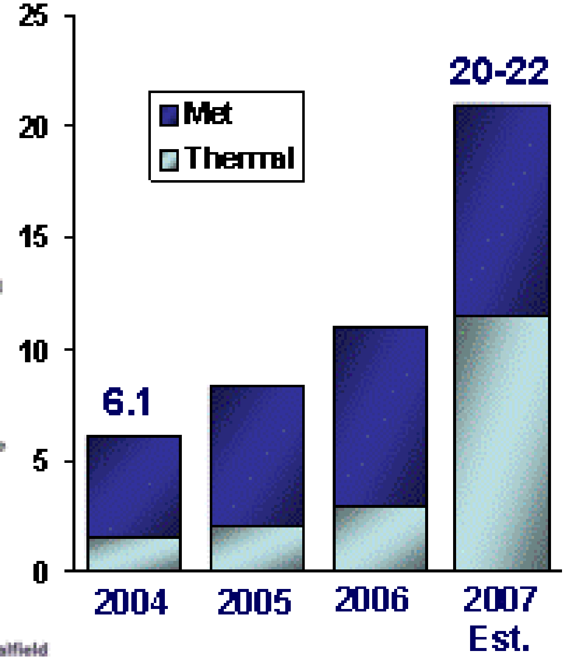
Peabody a Major and Growing Producer in World's Largest Export Nation

Peabody's Unpriced Tons[1]

2008: 13 - 15 Million
2009: 18 - 20 Million



Peabody's Australia Production Rises From 6 to >20 Million Tons



(1) Subject to transportation entitlements.

Australia Coal Chain Logistics Improving With More Capacity Planned

Coal Logistics Chain Capability

(Million Tonnes)

	2007	2008	2009	2010
Dalrymple Bay	48.7	54.0	65.0	
Newcastle	88.7	97.0	100.0	
NCIG	Design / Approval / Construction			Startup Design Rate 30.0

2008+ Improvements

- Quotas likely through 2008

Newcastle

- Added throughput planned for 2008 and 2009

Dalrymple Bay

- Port expansions planned in first and fourth quarter 2008
- Queensland Rail to add new train sets over the next year

NCIG

- Construction to begin by year-end
- First shipments targeted late 2009
- 30 MTPY capacity doubling over time

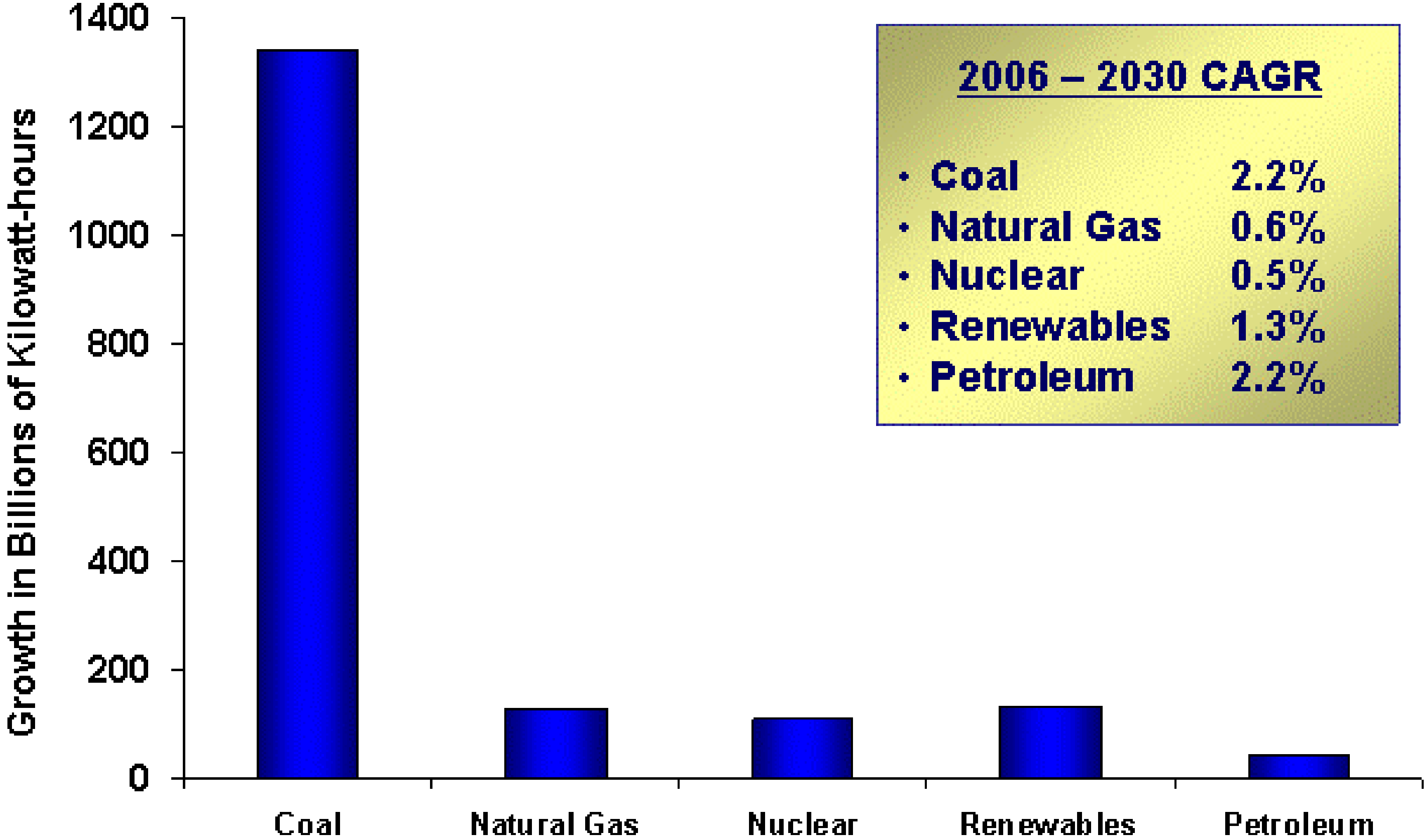
Source: Industry and port reports; Peabody analysis.

U.S. MARKETS AND PEABODY POSITION

Peabody

EIA: Coal Generation to Outpace All Other Forms Three to One Through 2030

Projected U.S. Electricity Generation Growth Through 2030



2006 – 2030 CAGR

• Coal	2.2%
• Natural Gas	0.6%
• Nuclear	0.5%
• Renewables	1.3%
• Petroleum	2.2%

Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Outlook 2007 and Monthly Energy Review, June 2007.

Peabody

High Price of Power & Competing Fuels Spurs New U.S. Coal-Fueled Generation

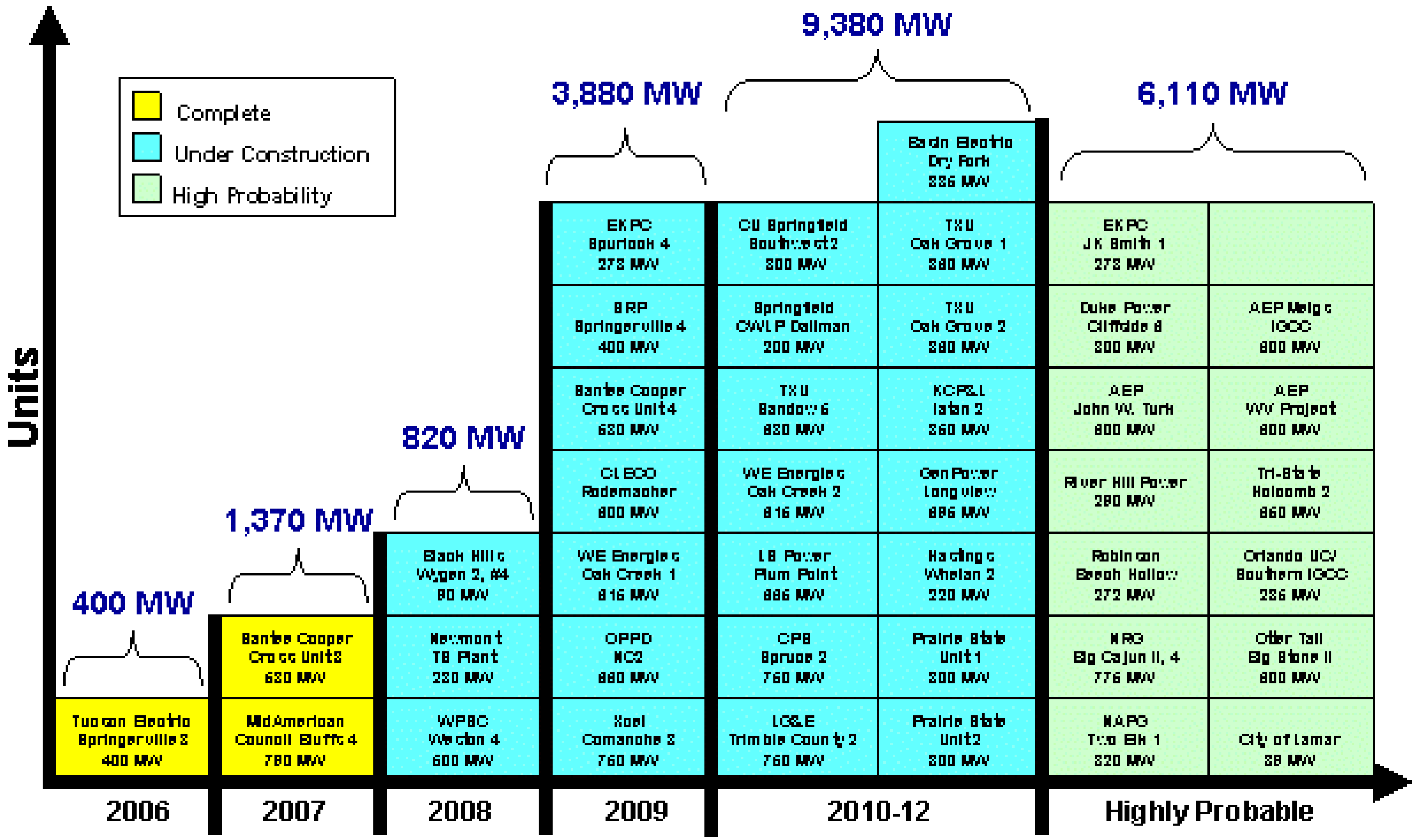
Largest New Coal Plant Build-out in Decades

- Nine units have begun construction in 2007
- 15,850 MW under construction or recently on line
- 6,100 MW likely to begin construction in next two years
- Majority of plants to be sourced from PRB and Illinois Basin

Site work is under way for the 1,600 MW Prairie State Energy Campus, whose air permit was recently affirmed by the U.S. Court of Appeals

Increased Long-Term Coal Demand Due to Increased Coal Generation

41 Units in 21 States Represent More Than 90 MTPY of Coal Use



Source: DOE NETL, "Tracking New Coal-fired Power Plants" May 2007; Public filings; Peabody analysis.

Coal's Future is Secure With Advanced Technologies

If Carbon is the Question, Technology is the Answer

Building New, Efficient Supercritical & IGCC Coal Plants
15% Lower CO_2 Emissions

Demonstrating FutureGen and Developing Coal-to-Liquids with CCS
Up to 90% Lower CO_2 Emissions

Retrofitting Existing Coal-Based Generation with Carbon Capture/Sequestration
Up to 90% Lower CO_2 Emissions

The Goal: Near-Zero Emissions

Democratic Support for Clean Coal, Technology Solutions

Nancy Pelosi

The Speaker's goal as part of her Energy Independence Day platform: "Using innovation to make coal part of the solution."

Barack Obama

"We'll need to invest more in the clean technology that will allow us to burn more coal, our country's most abundant fossil fuel."

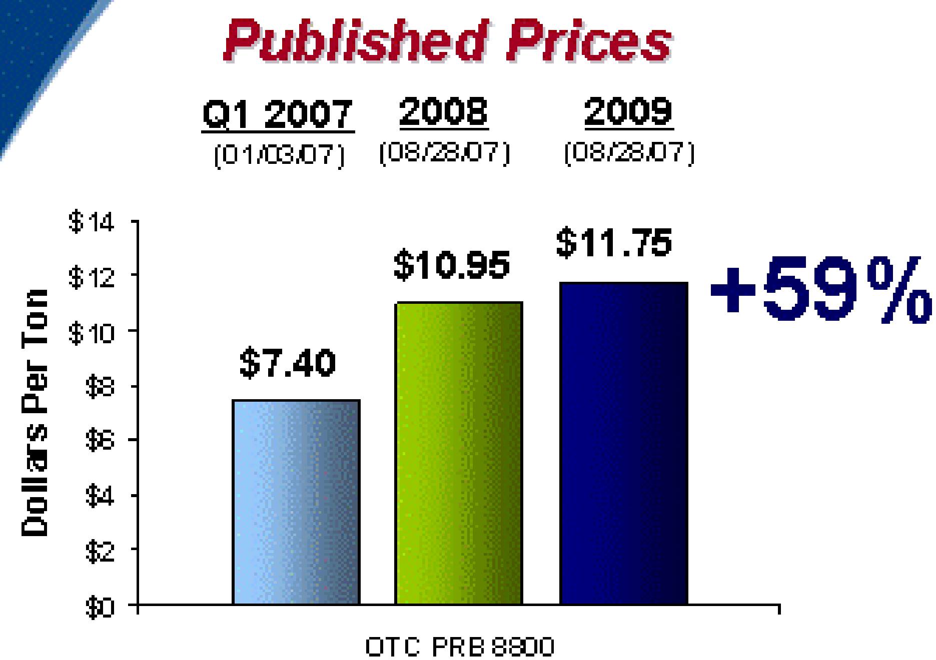
Hillary Clinton

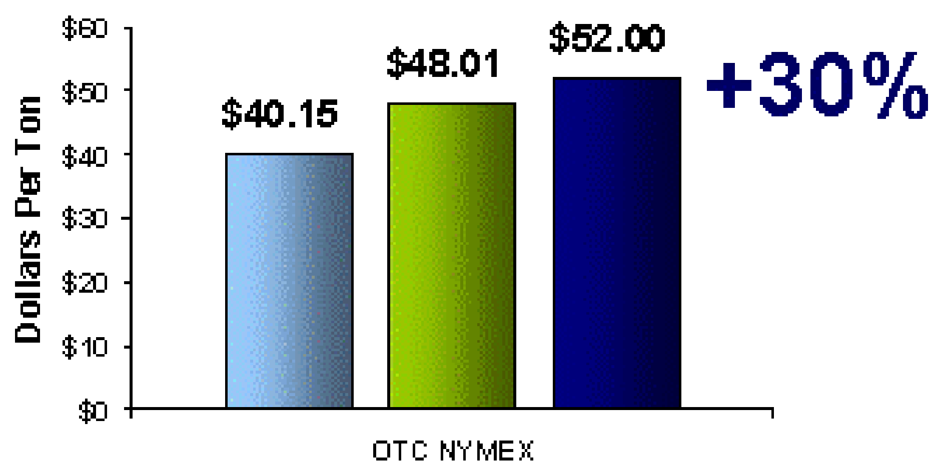
"Coal is to us what oil is to Saudi Arabia. And part of our domestic strategy must involve coal." Clinton calls for a $50 billion "Strategic Energy Fund."

Blue Dog Coalition

"Additional R&D into new technologies such as carbon sequestration and improving the emissions output from coal-derived fuels is also needed."

U.S. Markets Continue to Show Improvement in 2007





Source: Coal and Energy Price Report (CEPR), January 3, 2007 and August 28, 2007.

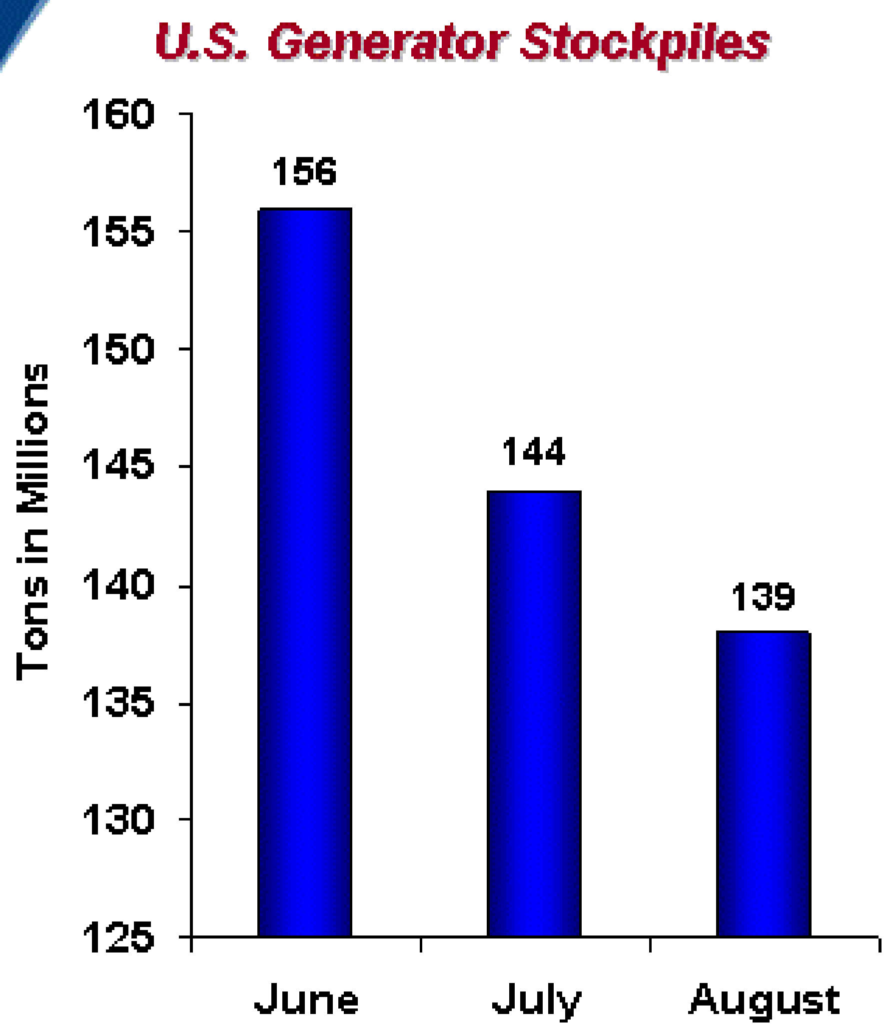
Peabody's Unpriced U.S. Tons

2008: 50 – 60 Million
2009: 130 – 140 Million

- Peabody's realized PRB prices 25% higher than second quarter 2006
- 38 million tons of premium PRB product priced 49% above average 2006 realized price
- Higher second half 2007 PRB shipments required to meet sales contracts

Peabody

Strong Seasonal Generation Begins to Draw Down Customer Stockpiles



- U.S. customer inventories decline 11% in less than two months
- Stockpile excess represents less than 20 million tons
- Higher inventories needed due to:
  - Added generation
  - Scare of 2005
  - Longer rail routes

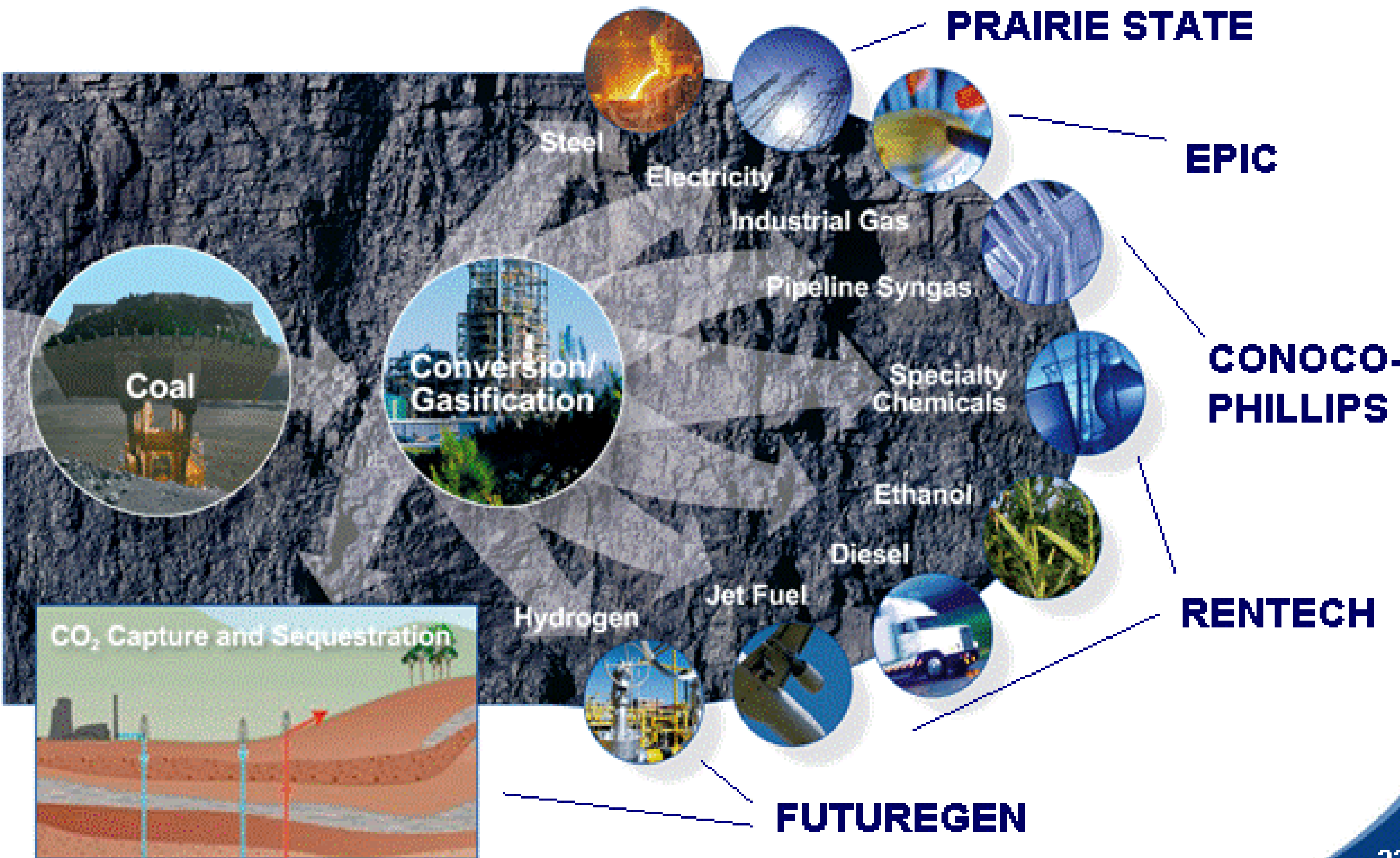
Source: U.S. Department of Energy, Energy Information Administration; Genscape; Peabody analysis.

Near-Term U.S. Markets: Supply / Demand Indicators to Watch Entering 2008

	Item	Effects	Implication
Supply	**Challenging Geology**	↑	Thinning Eastern seams drive production declines and cost increases
	Permitting Issues	↑	Uncertainty and delays challenge production at many Eastern surface mines
	New Safety Regulations	↑	Production and costs affected as upgrades occur at many mines
	Loss of Synfuels Credit	↑	Likely to lead to lower production due to marginal high-cost operations
Demand	**Economic Growth**	↗	Continued increases tempered by changes to off-peak demand
	Growing Net Exports	↑	Strong global met and steam demand and limited South America growth
	Natural Gas Pricing	→	No dispatch effects at $5.00/mmBtu; some minor regional effects
	Inventory Levels	↓	Higher-than-normal customer stockpiles carried over from lighter burns
	Inventory Direction	↑	Stockpiles declining with strong seasonal burns and production cutbacks

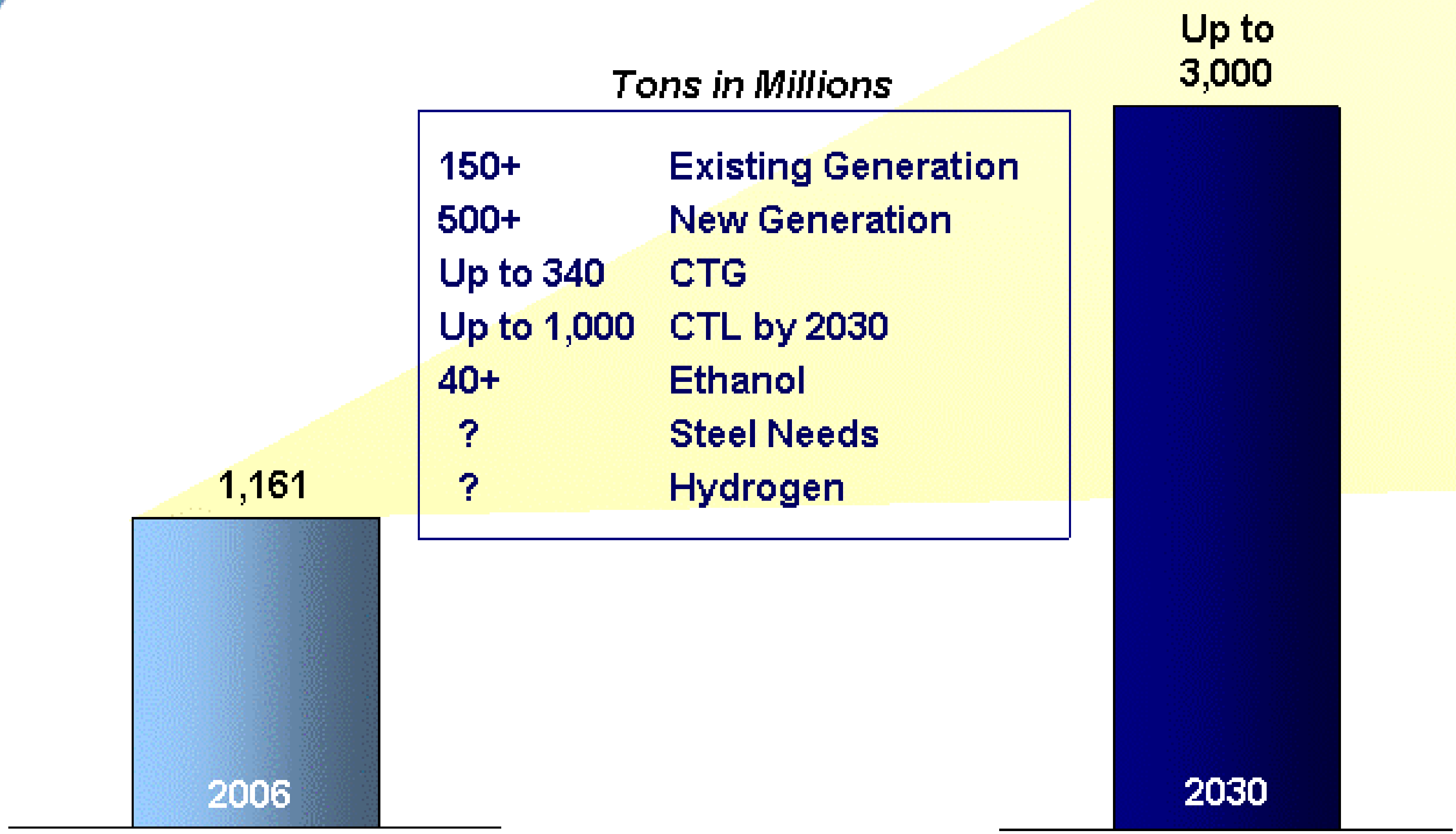
Btu Conversion Technologies Expand Markets for Coal

Peabody Participating in Clean Generation, CTG and CTL



New Markets Create Enormous Potential for Coal

U.S. Potential Coal Growth: Up to 2 Billion Tons



Source: Existing coal generation per Peabody estimate; New generation assumes 145 GW per NETL using 3 - 4 MTPY per gigawatt of power; Coal-to-natural gas (CTG) per National Coal Council; Coal-to-liquids (CTL) per U.S. Southern States Energy Board; Ethanol per Presidential initiative; Steel growth of ~5% CAPR through 2010 per International Iron and Steel Institute (10/02/06); Hydrogen development via FutureGen and other projects.

Peabody

Peabody Partnering with ConocoPhillips on New Coal-to-Natural Gas Facility

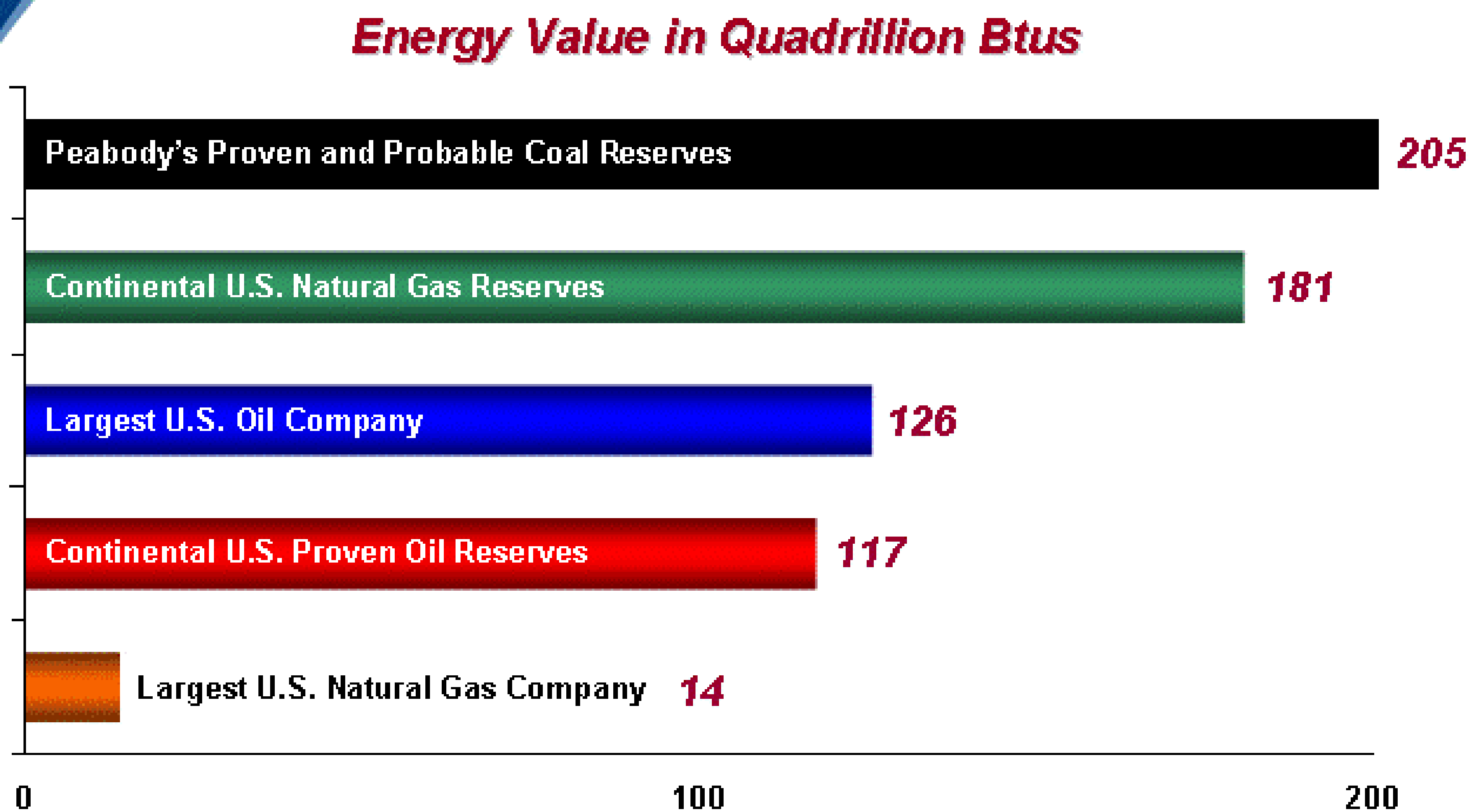
Major Commitment from Leading Global Oil & Gas Company

- Mine-mouth facility located on one of Peabody's large reserve holdings
- Production of 50 to 70 billion cubic feet of pipeline quality synthetic natural gas
- ~1.5 tcf in the first 30 years of production
  - Implies revenues of up to $500 million per year @ $7 / mcf
- 3.5 million tons annually of Peabody coal and petcoke
- Carbon capture and sequestration ready
- Preliminary design and economic assessment under way

ConocoPhillips

Peabody

Peabody's Energy Reserves Are Unmatched



BTU Has Multiple 100+ Million-Ton Sites to Fuel Generation / Btu Conversion

Source: Annual reports for selected energy companies, Energy Information Administration's U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves. Continental U.S. Oil and Natural Gas Reserves exclude Federal Offshore.

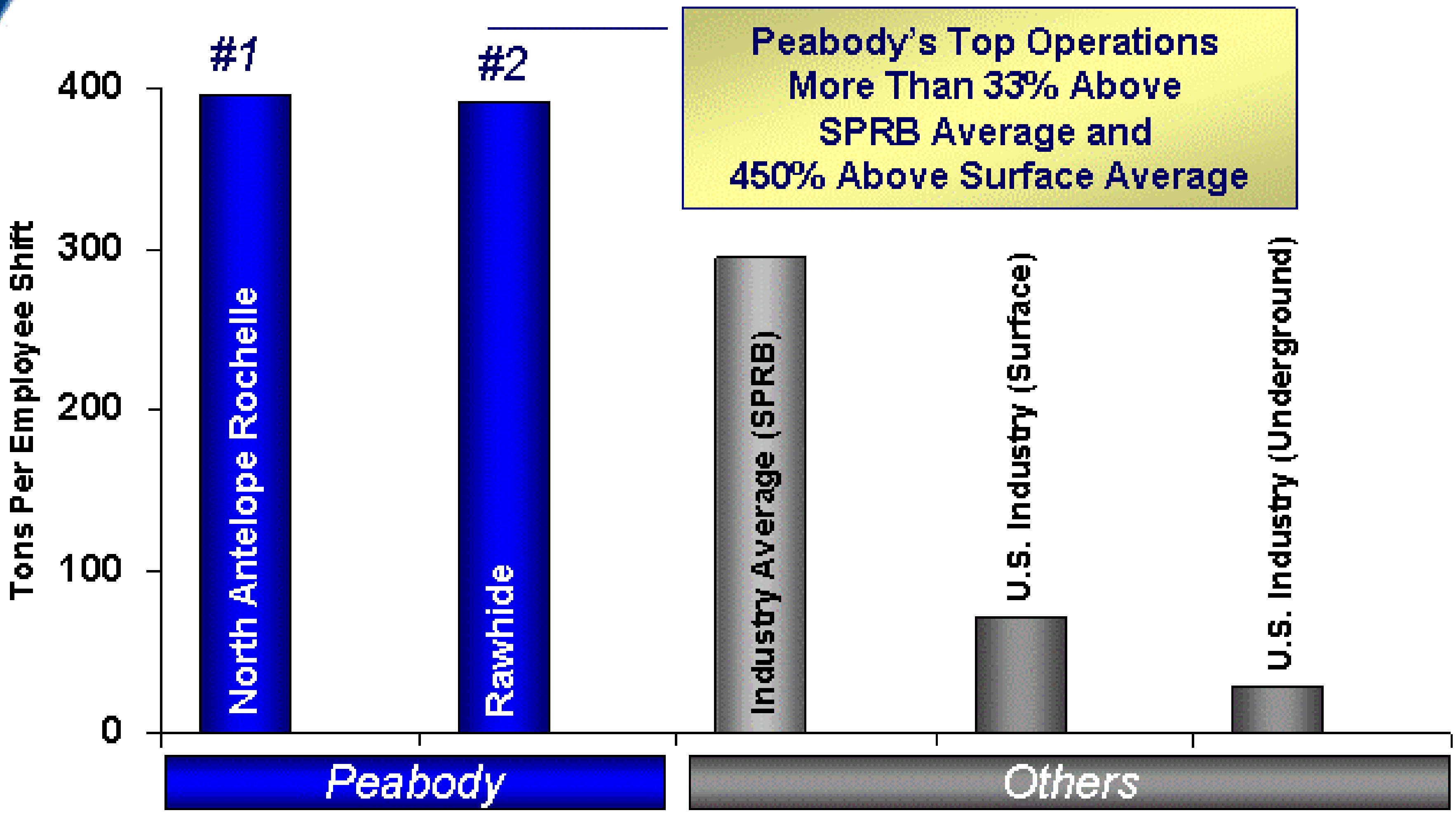
PEABODY'S APPROACH TO LONG-TERM VALUE CREATION

Peabody's Long-Term Strategies Target Margin Expansion and Growth

- Execute the basics: best-in-class safety, operations and marketing
- Capitalize on pipeline of projects
- Expand in high-growth global markets
- Participate in new generation and Btu Conversion projects

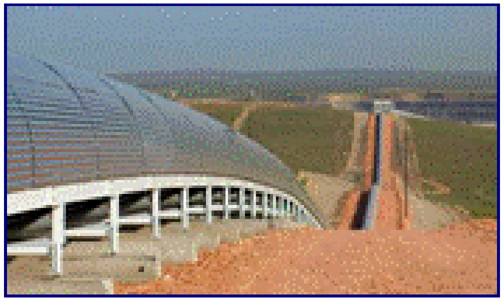
Executing the Basics: Leading Productivity

Peabody Operates the Most Productive Coal Mines



2006 data. Source: U.S. Department of Labor Mine Safety & Health Administration.

Capital Projects Improve Productivity and Lower Cost Structure



Examples

North Antelope Rochelle Dragline

- Dragline costs 75% lower than truck/shovel fleet
- Frees up equipment for deployment elsewhere
- Saves 2 million gallons of diesel per year

North Antelope Rochelle Conveyor

- Reduces truck costs by $2 million per year
- Saves 750,000 gallons per year of diesel fuel and reduces truck/tire needs

El Segundo Mine

- New mine in New Mexico features overburden ratio less than half that of Lee Ranch Mine
- Expected to reduce costs per ton 35%

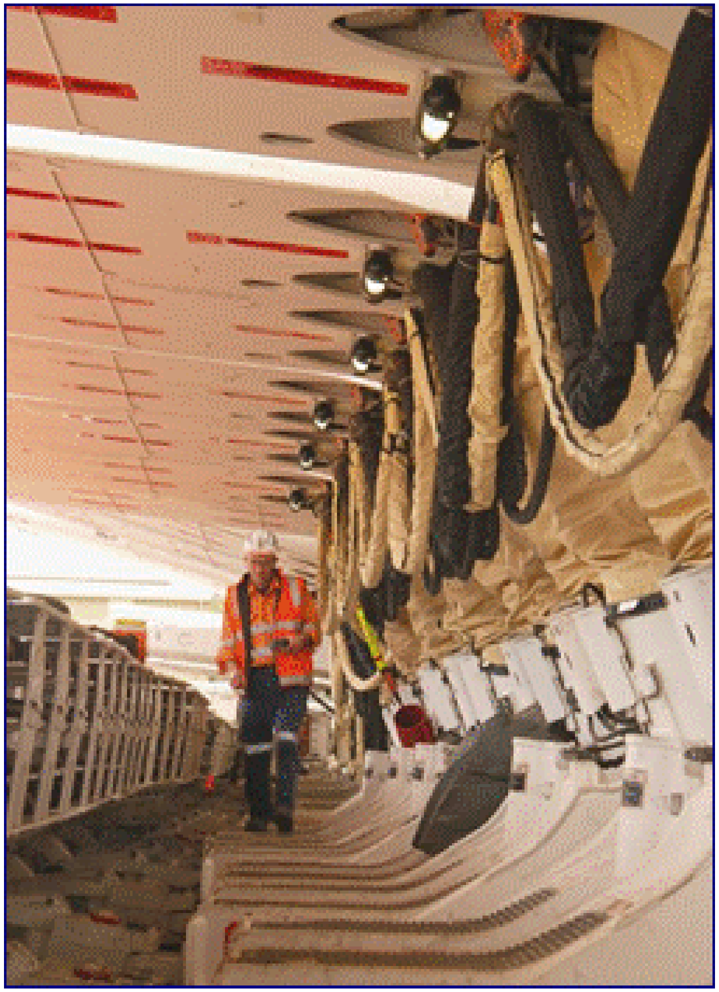
Wilpinjong Mine

- New mine with one of the best overburden ratios in Australia
- Thermal coal for domestic use and export

Peabody Dramatically Reshaping Operating Platform and Earnings Base

Focus on Costs, Productivity, and High-Growth Markets

- Installation of $165 million in productivity and cost improvement projects at flagship PRB operations
- Completion of build-out of new Australian growth platform, tripling long-term capacity
- Expansion of global trading locations to four continents
- Positioning for major growth in Asia-Pacific region
- Conclusion of strategic evaluation of Peabody's Eastern U.S. operations



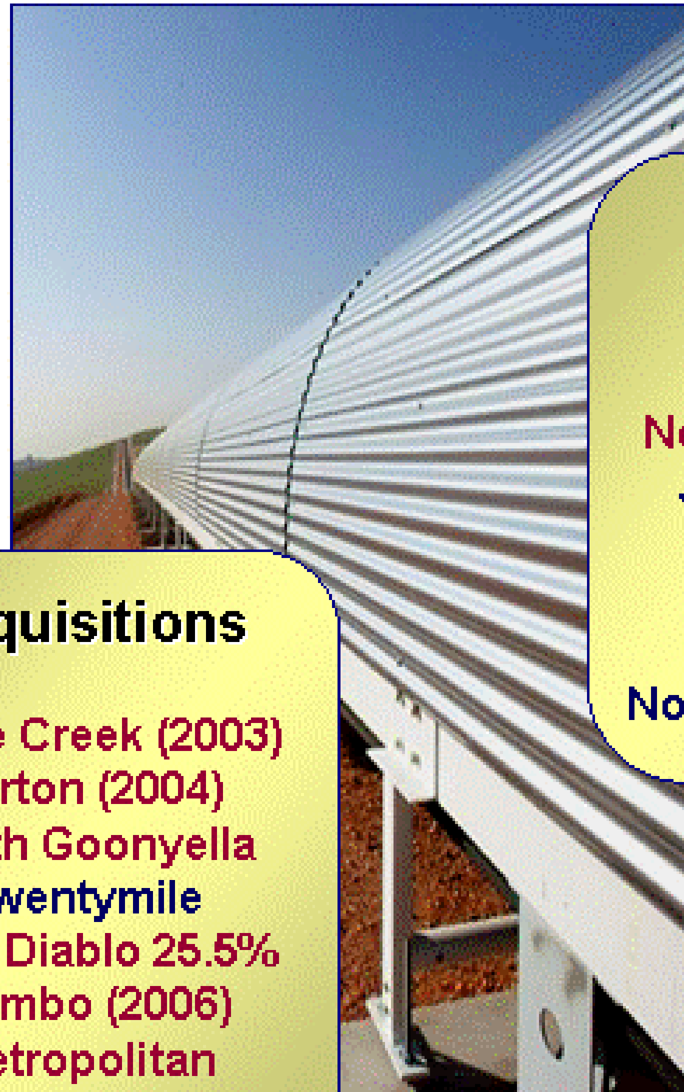
New North Wambo Equipment

Peabody

Pipeline of Major Projects Targets High-Growth Regions & Cost Improvements

Organic Growth

Eaglefield (2004)
Gateway (2005)
Wilpinjong (2007)
Millennium
North Wambo
El Segundo (2008)
Dyson Creek (2009+)
Bear Run
Wild Boar
Lively Grove
School Creek



Acquisitions

Wilkie Creek (2003)
Burton (2004)
North Goonyella
Twentymile
Paso Diablo 25.5%
Wambo (2006)
Metropolitan
Chain Valley

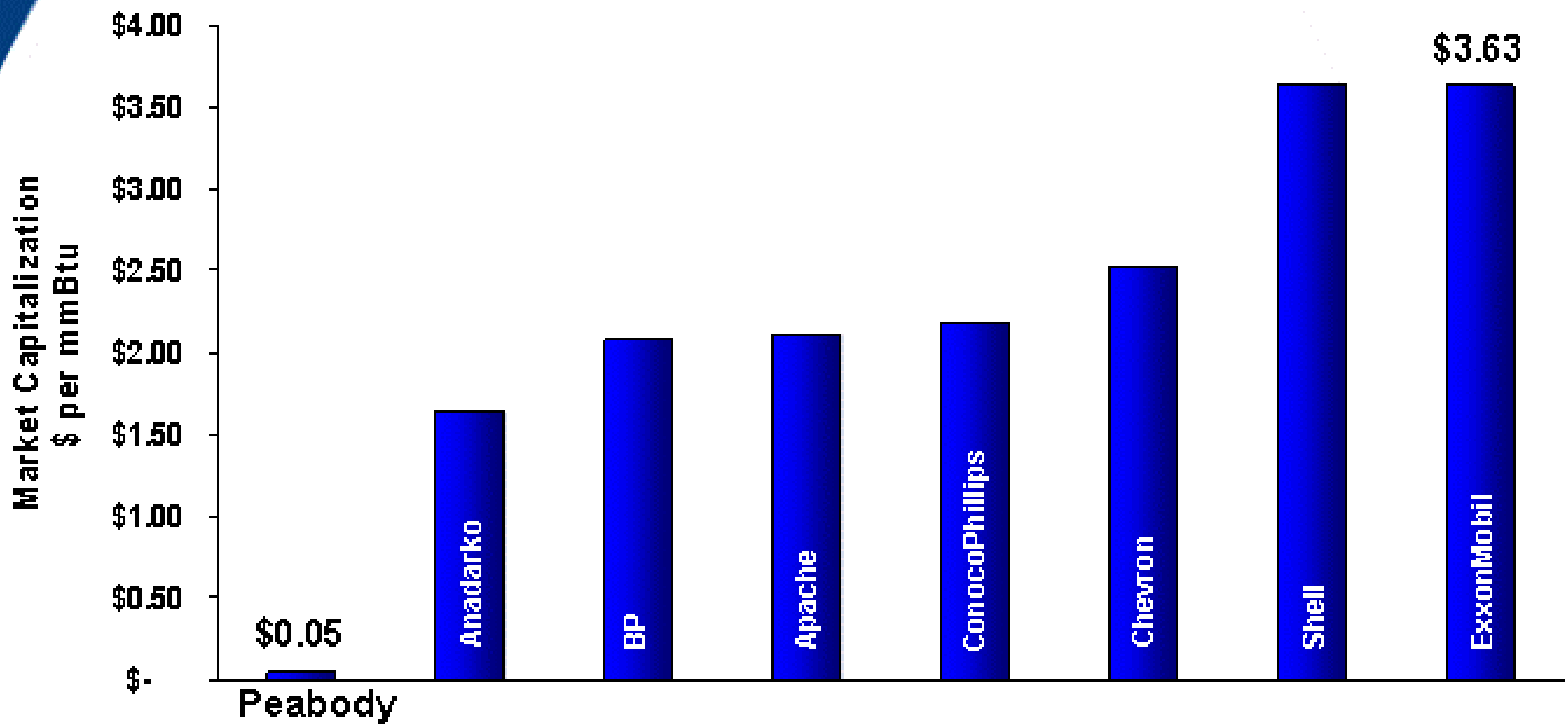
Cost and Mine Improvements

Federal (2004)
North Goonyella (2006)
James Creek (2006)
Black Stallion
Twentymile
Caballo (2007)
North Antelope Rochelle

International
United States

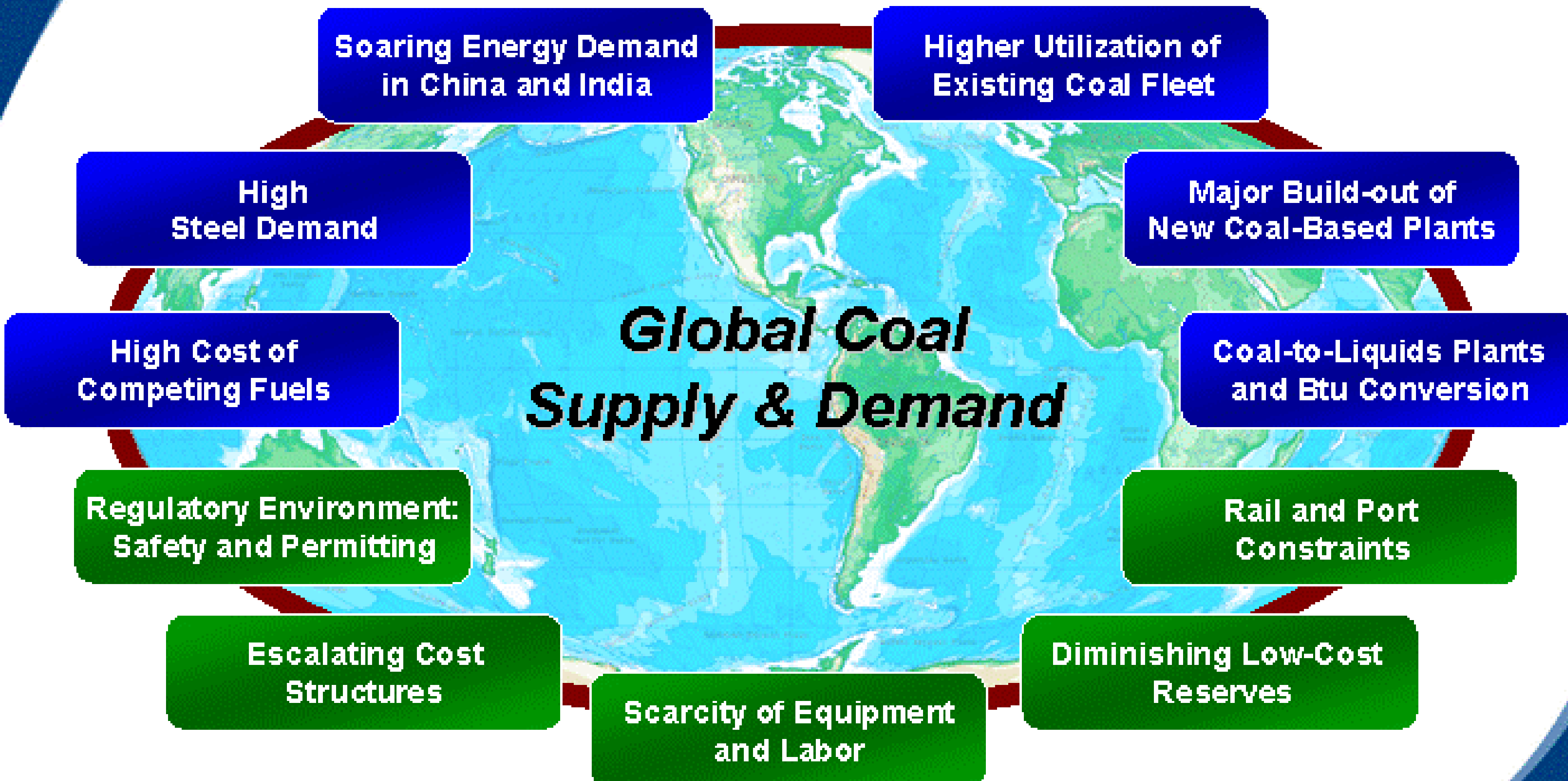
Btu Conversion = Value Conversion as We Narrow the Energy Valuation Gap

Market Capitalization on Btu-Equivalent Basis



Source: Company filings and reports.

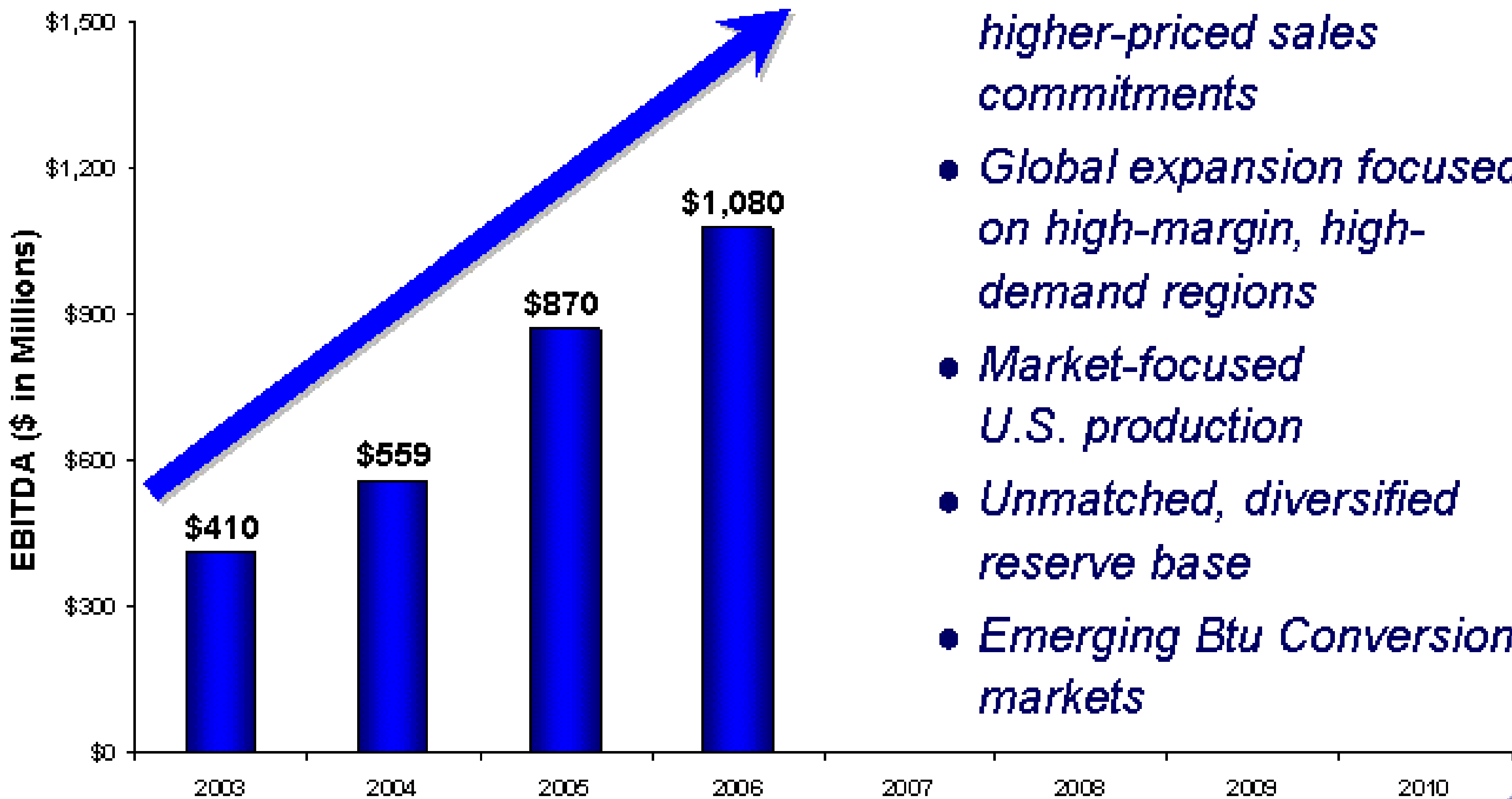
Major Market Drivers Provide Outstanding Outlook for Coal



DEMAND DRIVERS
SUPPLY DRIVERS

Peabody Has an Outstanding Outlook

Focus on Long-Term Shareholder Value



- *Revenue growth from higher-priced sales commitments*
- *Global expansion focused on high-margin, high-demand regions*
- *Market-focused U.S. production*
- *Unmatched, diversified reserve base*
- *Emerging Btu Conversion markets*

Lehman Brothers CEO Energy / Power Conference

September 6, 2007

Peabody Energy
NYSE: BTU

EXHIBIT 6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 N. 5th STREET
KANSAS CITY, KANSAS 66101

AIR PERMITTING AND
COMPLIANCE BRANCH

November 9, 2006

Clark Duffy
Kansas Department of Health & Environment
Bureau of Air and Radiation
1000 S.W. Jackson Street, Suite 310
Topeka, KS 66612-1366

Dear Mr. Duffy,

We appreciate the opportunity to review and provide comments on the proposed PSD permit for the Sunflower Holcomb Station Expansion Project. Our comments focus on recommendations to improve the enforceability of permit conditions, highlight concerns about the SO_2 BACT limit and offers suggestions for the continuous emission monitoring portions of the permit.

The underlying assumptions used in the SO_2 BACT analysis continues to be our most significant concern. This issue, which we describe in detail in Attachment A and was discussed during the Sunflower pre-application meeting, is one which we have commented on in previous coal-fired projects in Region 7. We hope our analysis helps inform applicants and permit review agencies on a more appropriate selection of the baseline sulfur potential for coal from the Powder River Basin. We encourage KDHE to carefully consider our comments and either establish a firm performance requirement for the scrubber or a range of BACT limits corresponding to the fuels that will be combusted in the Holcomb units. We intend to make similar comments on the other coal-fired projects now under consideration and plan to share these comments with the other Region 7 states.

As always, we appreciate KDHE's efforts in carrying out the PSD program. If you have any questions, please contact Jon Knodel at (913) 551-7622 or at knodel.jon@epa.gov.

Sincerely,

JoAnn Heiman, Acting Chief
Air Permitting and Compliance Branch

Attachments:

Attachment A – EPA Region 7 Comments on Sunflower Holcomb Station Expansion Project for New Units H2, H3 and H4

Attachment B – SO_2 Baseline Emissions at Region 7 NSPS Subpart D Units

Attachment C – SO_2 Emissions at Public Power Plants in Region 7

Attachment D – Sunflower Holcomb Summary of Subpart Da Emission Reports from July '98 through June '06

Attachment E – Burlington Northern "Guide to Coal Mines" Analysis

Attachment F – Excerpts from KCPL-Hawthorn Scrubber Performance Analysis

Attachment G – Excerpt from City Utilities of Springfield "BACT Emission Limitations for PC Boilers Firing Western Subbituminous Coal"

Attachment H – Excerpts from Draft PSD permit for Longleaf Energy Associates, LLC C/o LS Power Development, LLC

Attachment A
EPA Region 7 Comments on
Sunflower Holcomb Station Expansion Project
for New Units H2, H3 and H4

SO2 BACT and Baseline Assumptions

The SO_2 baseline selected by Sunflower Holcomb to evaluate BACT appears not to be representative of the Powder River Basin (PRB) coals historically used in Region 7, including Holcomb Unit 1, and should be reevaluated consistent with the comments below.

The department proposes a SO_2 BACT limit of 0.095 #/mmBtu, 30-day rolling average. The limit is premised on the use of a worst case "baseline" fuel with a SO_2 inlet potential of 1.23 #/mmBtu in conjunction with a 92 percent removal using a dry spray dry adsorber (SDA).

The BACT limit would apply at all times, except during periods of startup, shutdown, and malfunction. In the absence of a percent removal requirement the BACT limit would presumably allow for lesser scrubber performance if lower sulfur fuels are burned. While conceivable that Sunflower Holcomb might have occasion to use a higher sulfur coal, during periods when the lower sulfur coal is unavailable or otherwise uneconomical, or when they blend with bituminous fuels as a mercury reduction strategy, the long term use of such a baseline fuel appears to be unlikely based on historical trends observed over the last 26 years for uncontrolled NSPS utility boilers in Region 7.

To help determine what an appropriate baseline for PRB coal might be, we looked at CEMS data for all uncontrolled NSPS Subpart D utility boilers from 1980 through 2005. The data indicate that SO_2 inlet concentrations range from 0.62 to 0.87 #SO_2/mmBtu, annual average, respectively. In the years prior to implementation of the acid rain program, uncontrolled NSPS utility units in Region 7 burned coal with a SO_2 potential of 0.73 - 0.87 #SO_2/mmBtu, with the trend generally declining. In the years following implementation of the acid rain program, uncontrolled NSPS utility units in Region 7 burned coal with a SO_2 potential of 0.62 - 0.71 #SO_2/mmBtu, again with a lowering trend. Despite the requirement to comply with the 1.2 #SO_2/mmBtu standard under NSPS Subpart D and to hold sufficient allowances under the title IV Acid Rain Program, it appears these units continue to make fuel choices, based on other incentives that result in SO_2 emissions well below their compliance obligations. This indicates that such coals are readily available and have been for many years. Please see Attachment B for more details.

Between 1995 and 2005, the highest average SO_2 inlet concentration for a single, uncontrolled NSPS unit in Region 7 was 0.81 #SO_2/mmBtu. This occurred at the Nearman Creek facility in Kansas City, Kansas in 2002. Nearman Creek is appropriate for comparison to the Sunflower Holcomb Power Station since both are public power facilities and both likely face similar constraints when purchasing compliance coal (e.g. low bid contracts, small purchaser). All annual average emissions data evaluated since 1995 were at or below 0.81 #SO_2/mmBtu. Likewise, all emissions data analyzed for uncontrolled NSPS Subpart D utility boilers since 1990, including over 217 utility years of certified emissions data, were below a maximum annual potential SO_2 inlet concentration of 0.92 #SO_2/mmBtu. Given the long history and utility-wide nature of this information, it appears that the baseline used in the Sunflower Holcomb SO_2 BACT demonstration may not be representative of pre-control emissions expected while combusting PRB coal.

But, annual average SO_2 inlet concentrations may not tell the whole story. Sulfur in coal is variable and can impact short term emission averages. Over longer averaging periods the effects of variability are minimized. Since BACT emission limitations generally must be established using shorter term averages, adjustments to the annual average data may be appropriate. To estimate the magnitude of an annual-to-30-day-rolling-average adjustment, we looked at the monthly variability for the Nearman plant and seven other public power facilities in Region 7 from 1997 through 2002. During this period, monthly emissions – which are similar to those that might be observed using a 30-day rolling average – showed 97% of the SO_2 concentrations were less than 0.82 #SO_2/mmBtu and 99% were less than 0.90 #SO_2/mmBtu. Two of the 846 utility-months of data analyzed had SO_2 inlet concentrations greater than 1.0 #SO_2/mmBtu and were clearly outliers. See Attachment C for a summary of the analysis.

While clear that utilities included in the Region 7 analysis have periodically used higher sulfur fuels during times when their preferred fuel supply was unavailable, these infrequent events should not serve as the basis for setting a long term BACT standard. In fact, these periods of higher emissions are already reflected in the annual and monthly data analyses described above. Again, this analysis shows that the baseline used in the Sunflower Holcomb SO_2 BACT demonstration may not be representative of pre-control emissions likely to occur while combusting PRB coal. It is also important to note that when multiple assumptions are used to determine a BACT emission limit they should be evaluated on a consistent time basis. In this case, the BACT limit is derived from applying a 92% removal efficiency to a design sulfur inlet concentration. But, if the 1.23 #SO_2/mmBtu value presented by Sunflower represents a short-term, peak (e.g. instantaneous or1-hr) inlet concentration and the 92% spray dry adsorber (SDA) removal efficiency represents performance over an extended period such as a year, then this apples-to-oranges comparison does not provide a meaningful result. Scrubber performance is usually based on long term performance guarantees and can have higher performance results over the short term. When considered together on a consistent time basis, long term scrubber performance and inlet SO2 potentials appear to result in a substantially lower SO_2 BACT limit than proposed in the PSD permit.

In Footnote 3 of “Supplement 3 – Summary of Permit Activity Since Completion of BACT”, Sunflower notes the Holcomb Expansion Project, including new Units H2, H3, and H4, has been planned to make maximum use of existing on-site fuel and reagent supplies and handling equipment and will utilize the same supplies of approximately 0.5 percent western low sulfur coal. While past performance doesn’t necessarily indicate future performance, it is instructive to look at look at historical emission trends when determining if the assumptions used in the BACT analysis are reasonable. To better understand performance at Holcomb Unit H1 over the past several years, we used Sunflower's quarterly NSPS Subpart Da emission reports to compile a summary of daily, 30-day compliance averages, for Sunflower H1 from July, 1998 to the present. These analyses offer insights on trends of inlet and outlet SO_2 concentrations, the effectiveness of the dry scrubber and outlet NO_x and CO emissions.

In general, pre-control inlet SO_2 concentrations at Holcomb are consistent with those observed at other Region 7 utilities using PRB coal. Inlet SO_2 concentrations, based on 2,620 daily observations made by certified CEMS, range from 0.50 to 0.95 with over 99% of the data below 0.91 #SO_2/mmBtu. These data suggest that the design baseline for Holcomb Units H2, H3 and H4 may be too high and should be re-evaluated in light of these actual on site data. Further, the Holcomb data indicates that had it complied with a 92% level of scrubber control – a hypothetical value based on the BACT level of control for the new units – it would have been able to meet a BACT limit of 0.075 #SO_2/mmBtu over 100 percent of its operating time. For more information, see excerpts from the spreadsheet titled “Sunflower Subpart Da Emissions Data.xls” in Attachment D and on the enclosed CD.

A report prepared by Burlington Northern and Santa Fe Railway, titled a “Guide to Coal Mines”[http://www.bnsf.com/markets/coal/pdf/mineguide.pdf], offers additional insights into coal quality in the region. The report contains general information on the coal mines it serves, many of which are located in the Powder River Basin regions of Wyoming and Montana. We extracted pertinent data for each of the mines and prepared a summary report which is included in Attachment E. The summary shows the SO_2 equivalent of PRB-Wyoming to be 0.74 - 0.76 lbSO_2/mmBtu, on average. These BNSF data suggest that at a 92% control efficiency or better, the corresponding emissions would be in the range of 0.06 #SO_2/mmBtu on a 30 day rolling average.

Setting SO_2 BACT at 0.095#SO_2/mmBtu, without a corresponding percent reduction requirement, effectively allows Sunflower to operate the SDA at an efficiencies of 83.8% and 90.3% when burning PRB coals with an average SO_2 inlet concentration of 0.59 #SO_2/mmBtu and 0.98 #SO_2/mmBtu, respectively. These SO_2 inlet concentrations represent the average and worst case monthly average inlet concentrations for all NSPS Subpart D affected public power units in Region 7 between 1997 and 2005. If realized in practice, this level of scrubber performance falls well short of the long-term design performance anticipated for a SDA as BACT. We have observed this trend first hand at the Kansas City Power and Light Hawthorn Unit 5, where the BACT emission limitation was based on a “worst-case” PRB design baseline that has yet to be utilized. Since 2003, Hawthorn has achieved sustained removal efficiencies of 77 - 82%. Because the permit provides no incentive to reduce further, Hawthorn appears to be operating the scrubber well below its design capability even though it is meeting its BACT limit. Portions of this analysis can be found in Attachment F.

The Sunflower application and permit record could benefit from further evaluation of “better than 92 percent” BACT strategies for SO_2. The application and permit record make only brief mention of more rigorous removal options but provide no meaningful discussion on why these strategies were eliminated. However, recent permitting actions for Newmont, LS Power Longleaf, and even the City Utilities of Springfield Southwest projects evaluated, and in some cases established, "effective" removal efficiencies higher than 92 percent. All concluded that 92 percent, or better, removal is technically and economically feasible with adequate margin of compliance safety. City Utilities of Springfield, for example, prepared a detailed analysis titled "BACT Emission Limitations for PC Boilers Firing Western Subbituminous Coal" [see Attachment G] in support of the PSD permit for its Southwest Power Station. Even though the analysis suffered from the same flaw on PRB baseline coal concentration described above, the study concluded that downtime to complete routine scrubber maintenance, swap out atomizers, and maintain a continuous 94 percent control efficiency would impact its ability to maintain an adequate compliance safety margin. For these reasons, the study concluded that 92 percent control represented BACT. More recent permitting actions at Newmont and LS Power Longleaf conclude that scrubber performance in the 93.5 to 95 percent range should be attainable.

To determine if existing data for the Holcomb and Hawthorn units might help inform the record, we looked at scrubber performance for both units. In general, we concluded that while interesting, the data are not that instructive in setting BACT for the new Holcomb units. The existing Holcomb unit is subject only to a 70% control requirement under NSPS Subpart Da and therefore has had little incentive to control beyond. In 2001 to the present, about the time Sunflower sought approval of its original Sand Sage project, it appears Holcomb began experimenting with the scrubber to achieve higher efficiencies. As a result, the unit experienced even lower SO_2 emissions for the past couple of years. Likewise, as indicated above, KCPL Hawthorn has experimented with its scrubber to achieve high rates of removal over short periods of time, but because neither unit has adequate incentives, the scrubber data, in general, do not appear to reflect the effectiveness we would anticipate from a modern dry scrubber design. Therefore, these data do not help to inform the BACT record significantly. We encourage Sunflower to undertake an analysis similar to those for Newmont, LS Power Longleaf, and City Utilities of Springfield, using the proper baseline coal, to document if higher scrubber efficiencies can be maintained, and if not why not.

To compensate for potential under performance of the SDA while burning lower sulfur PRB coals, we believe the final permit should condition Sunflower Holcomb to achieve a 92% reduction, or better, based on a 30-day rolling average, in addition to the appropriate BACT emission limitation. To assure that the SDA is operated in a highly effective manner during all periods of operation, the permit should also require Sunflower Holcomb to install, operate, maintain, and quality assure an <u>inlet</u> SO_2 CEMS, in addition to the required stack CEMS, to verify that performance across the SDA is achieved. Since these CEMS are already required by NSPS Subpart Da, it should not be an imposition to include in the permit.

In the alternative, if the department decides not to establish an on-going SDA performance requirement as part of the permit, then we believe it is essential that the department establish a series of BACT emission limitations for each coal, or blends, with unique SO_2 inlet concentration characteristics. For example, if Sunflower Holcomb anticipates they may utilize a PRB coal, or bituminous blend, with a 1.23 #SO_2/mmBtu inlet concentration, then a BACT limit of 0.095 may be appropriate during those limited periods of time. On the other hand, if Sunflower Holcomb combusts PRB with sulfur characteristics more typical of those burned by

Holcomb and similar utilities throughout the region, then a SO_2 emission limitation of 0.060 – 0.075 #SO_2/mmBtu appears to be a more appropriate BACT limit. A good example of this tiered approach was proposed by LS Power Longleaf. This project is currently undergoing public comment at the Georgia Department of Natural Resources and the relevant excerpts can be found in Attachment H. This permit is particularly interesting because many of the key design features, including the type of fuel and control technologies, are similar to those proposed by Sunflower. In brief, the Georgia permit establishes three SO_2 BACT limits, premised on a 93.5% removal efficiency, that vary depending on the SO_2 inlet concentration to the boiler. The proposed permit limits, while derived in a different manner than we describe above, are consistent with those we recommend above.

In summary, we believe it is inappropriate to establish BACT on a set of factors that occurs less than one percent of the time and thus undermines a BACT level of control during the remaining 99 percent of normal operations. Based on the Sunflower permit record and our review of other similar projects in the Region, the 0.095 # SO_2/mmBtu BACT limit, by itself, does not effectively implement a BACT level of control over the variability of fuel inputs Sunflower may choose to use. Therefore, we recommend that the department establish an explicit SO_2 percent removal requirement, no less than 92%, or in the alternative two or more BACT limits that reflect at least 92% control over a range of SO_2 inlet concentrations. We want to make clear that it is not our intent to limit Sunflower's fuel flexibility to use a range of low sulfur PRB coals or other modest low sulfur bituminous blends, but rather to assure that a BACT level of control is achieved at all times.

As a general disclaimer, we clearly understand that the proposed Sunflower Holcomb units are not uncontrolled utility boilers subject to NSPS Subpart D. Nevertheless, the data analyzed for Holcomb and other units in the Region are highly informative on SO_2 inlet potential concentration for units combusting PRB coal and should not be overlooked. To assist the department in its investigation of the baseline coal issue, the enclosed CD-ROM contains the spreadsheets with all of the analysis described above.

Continuous Particulate Matter Monitoring (PM-CEMS)

In 2004, EPA promulgated final performance specifications, PS-11, for installation, operation, maintenance, and quality assurance of continuous particulate matter emission monitoring systems (PM-CEMS). For a number of reasons, we believe the proposed Sunflower Holcomb units are capable of installing this equipment and pushing the knowledge base forward. First, these are state-of-the-art utility boilers which will benefit from a host of new technology. Since the PSD program is meant to be technology forcing, requiring a PM-CEMS would be consistent with that goal. Second, utilities can emit large amounts of particulate matter when control devices are not functioning correctly. The PC-CEMS is a valuable tool to help enhance baghouse performance while also providing direct information to verify that the unit is meeting its PM BACT emission limitation. Third, utility companies typically have very experienced instrumentation staff. Sunflower is no exception, having nearly 30 years of experience operating a Subpart Da CEMS network and another 10 years running the sophisticated acid rain monitoring equipment. Sunflower clearly has the expertise to manage the acquisition, installation, operation of complicated monitoring technology and oversee the critical testing that is essential to the proper functioning of the PM-CEMS. Fourth, utility companies typically have the economic resources to purchase complicated monitoring technologies and the support necessary to ultimately make them work. Fifth, Sunflower has demonstrated leadership in the past on a number of technical initiatives with the Electric Power Research Institute and the Department of Energy. We'd like to encourage this same level of exploration to move the PM-CEMS technology forward. Sixth, these devices have been required as part of the national power plant enforcement cases and most of the recently issued PSD permits. We want to see this trend continue and encourage all of the Region 7 states to promote PM-CEMS for large coal-fired utility projects. Lastly, the coarse filterable PM limit in “Air Emission Limitations” 2c. lends itself to measurement using a PM-CEMS. When these factors are considered together, it seems appropriate to promote the technology and look for “beyond the NSPS” solutions. In that regard, we strongly encourage the department to work with Sunflower to incorporate PM-CEMs for the new Holcomb units.

CO BACT and Continuous Emission Monitoring

As part of our analysis of Sunflower quarterly Subpart Da emission reports, we looked at CO emissions reported for Holcomb Unit H1. Sunflower reports these emissions pursuant to its federal PSD permit. In general, the data indicate that CO emissions are very low, in the range of 0.02 to 0.05 #CO/mmBtu, 30 day rolling average. While not directly comparable to CO emissions from the new units, because of the low NO_x burner technology and selective catalytic reduction units proposed for the new boilers, it would be instructive to have similar monitoring information to assure compliance with the higher 0.15 #/mmBtu, short term average BACT limit. We recommend that KDHE replace the one time initial stack test under “Compliance and Other Performance Testing” Condition 1 with a requirement for Sunflower to install, calibrate, maintain, and quality assure CO-CEMS on each of the three new units. These continuous data provide valuable information which allows Sunflower to certify annual compliance under its Title V permit. CO data can often also assist the boiler operator to optimize combustion and maximize fuel efficiency. As part of this reconsideration, KDHE should determine whether it would be more appropriate to retain the short term averaging period and current proposed BACT limit or lengthen the averaging period (e.g. 30 day rolling) and lower the BACT limit since any variability in short term transient spikes would be flattened over time.

<u>CEMS... In General</u>

The permit requires installation of NO_x and SO_2 CEMS consistent with NSPS Subpart Da, but is silent on the use of the CEMS data for verification of BACT limits in the permit. We'd like to see an explicit statement in the permit that Sunflower will install, operate, maintain, and quality assure such CEMS to verify direct compliance with the BACT limits. This approach helps meet the compliance assurance monitoring (CAM) requirements under Title V, allows Sunflower to certify annual compliance with the permit limits, provides the public with direct compliance information and minimizes any confusion over the use of CEMS data at some later date. There is no doubt that the CEMS data constitute direct compliance data under NSPS Subpart Da, so it shouldn't be controversial to extend this clarification to the PSD permit as well.

<u>Boiler Operating Day</u>

The draft permit, under “Air Emission Limitations” Condition 2, 2nd paragraph, notes that “day” [as in boiler operating day] shall have the same meaning as in NSPS Subpart Da. For units constructed prior to February 28, 2005, a boiler operating day is one in which the boiler operates the entire 24-hour period. For new units constructed after that date, a boiler operating day is one on which the boiler operates for any period of time. Given the contentious nature of the Subpart Da revisions and uncertainty in how these issues might be resolved, we believe it is appropriate for the PSD permit to consider <u>all</u> periods of normal operation in the calculation of the 30-day rolling average, whether the boiler operates all 24 hours in a day or not. This approach assures that valid CEMS data are not arbitrarily discarded when determining compliance with the BACT limits just because the boiler does not operate the entire 24-hour period. Hard coding the definition of “boiler operating day” in the permit also provides assurance to Sunflower, KDHE, EPA, and the public that the compliance procedures for the PSD permit remain static, independent from Subpart Da, and minimize the impacts of having to make expensive software changes to the data acquisition and handling system.

<u>PM_{10} BACT Limit and Process for Change of Limit</u>

“Compliance and Other Performance Testing” Condition 8 describes a process that allows Sunflower to petition KDHE for a new PM_{10} limit if unable to achieve the 0.018 #/mmBtu BACT limitation after the initial compliance demonstration and subsequent evaluation period. While we don't object in principle to the general approach outlined in the permit -- as long as Sunflower makes bone fide efforts to meet the 0.018 #/mmBtu BACT limit -- we have concerns about the unilateral approach KDHE gives itself to adopt the new limit. Given the diverse opinion on PM_{10} test methods and how such test data may be used, we believe that any change in the PM_{10} limit should undergo an opportunity for public and EPA peer review. Therefore, we ask KDHE to revise Condition 8, or other as appropriate, to include an explicit requirement for public review of the departments action. We also recommend that Sunflower and KDHE coordinate development of the testing protocol with EPA Region 7 to assure that there are “no surprises” before or after the testing program commences.

<u>BACT and Modeling Analysis for Units that Commence Construction beyond the Initial 18 Month Period</u>

"General Provisions", Condition 2, requires Sunflower to submit information for reevaluation of the BACT and modeling analyses for <u>any</u> unit that does not commence construction within the initial 18 months of permit issuance. It is important that KDHE retain this requirement to assure that each unit, before constructed, has been reviewed for the latest developments in air pollution control technology and that subsequent emissions growth in the area have not exceeded the NAAQS or PSD increments. Where multiple units are involved, there can sometimes be confusion about the severability of this requirement, so it is imperative to make clear that unless all three units commence construction, as defined in the PSD rules, within the initial 18 month period those units that do not must undergo reanalysis. KDHE's proposed permit language appears to carry out this concept, but could benefit from additional clarity as described below.

Once Sunflower submits a reanalysis of BACT and modeling studies, KDHE may authorize an additional 18 months in which Sunflower may commence construction of subsequent units. As we note in our comments on revision of the PM_{10} BACT limit, any such permit extension for subsequent units should benefit from public and EPA peer review. Therefore, we recommend that KDHE add this additional clarification.

Lastly, if Sunflower does not commence construction on one or more of the units and does not provide the analysis required by the permit in a time frame prior to the close of the 18 month period, KDHE should make clear that authorization to construct any subsequent units automatically becomes void. It is essential that Sunflower submit the reanalysis in a timely fashion or they must begin a new PSD permitting review. Again, KDHE may want to provide this clarification in the permit, or associated record, so there is no confusion later on.

<u>Short Term SO_2 Limit Based on Modeling Analysis</u>

The revised AERMOD modeling analysis, submitted in September, 2006, notes that it may be appropriate to establish a short term 3-hour limit for SO_2. This limit would assure the modeling assumptions remain valid if Sunflower chooses to combust coal with sulfur content greater than 0.5%. Since the permit does not restrict fuel flexibility, we recommend that the department include the recommended limit, 4,358 #/hr, 3-hour average, as a condition of the permit.

[End of Comments]

Attachment B
SO_2 Baseline Emissions at
Region 7 NSPS Subpart D Units

SO_2 Emissions Data for NSPS Subpart D (unscrubbed) Units

		1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1980 – 2005 Average	1980-2005 (Max)	1980-2005 (min)	Maximum Swing from Average
SO2 Rate	Ames 8		1.12	0.41	0.40	0.42	0.44	0.36	0.36	0.38	0.34	0.36	0.34	0.34	0.34	0.40	1.12	0.34	0.72
	CBEC 3	0.68	0.85	0.66	0.76	0.70	0.73	0.80	0.74	0.68	0.65	0.65	0.59	0.52	0.55	0.68	0.85	0.52	0.17
	Neal 3	1.13	1.32	0.73	0.83	0.73	0.73	0.72	0.68	0.66	0.72	0.67	0.70	0.71	0.68	0.76	1.32	0.66	0.56
	Neal 4	1.13	0.73	0.72	0.71	0.77	0.76	0.77	0.73	0.65	0.71	0.68	0.74	0.63	0.67	0.74	1.13	0.63	0.39
	Lansing 4	1.16	0.70	0.67	0.69	0.61	0.58	0.77	0.74	0.66	0.63	0.55	0.61	0.65	0.65	0.69	1.16	0.55	0.47
	Louisa 101		0.79	0.75	0.76	0.77	0.75	0.72	0.70	0.64	0.59	0.58	0.58	0.65	0.60	0.67	0.79	0.58	0.12
	Ottumwa 1		0.82	0.72	0.71	0.77	0.71	0.72	0.70	0.66	0.65	0.59	0.67	0.66	0.64	0.69	0.82	0.59	0.13
	LaCygne 2	4.14	0.94	0.83	0.70	0.77	0.75	0.78	0.73	0.68	0.72	0.69	0.69	0.69	0.74	0.73	4.14	0.68	3.40
	Nearman 1		0.82	0.75	0.72	0.67	0.67	0.76	0.84	0.72	0.78	0.81	0.77	0.78	0.77	0.76	0.84	0.67	0.09
	Iatan 1	0.66	0.77	0.72	0.72	0.72	0.75	0.76	0.74	0.65	0.62	0.61	0.65	0.70	0.73	0.70	0.77	0.61	0.09
	GG 1	0.73	0.72	0.73	0.62	0.63	0.47	0.47	0.47	0.52	0.57	0.59	0.56	0.60	0.49	0.57	0.73	0.47	0.17
	GG 2		0.73	0.72	0.61	0.62	0.48	0.51	0.47	0.50	0.57	0.57	0.54	0.58	0.53	0.56	0.73	0.47	0.16
	Whelan 1		0.91	0.50	0.52	0.68	0.63	0.64	0.72	0.64	0.61	0.67	0.66	0.69	0.74	0.66	0.91	0.50	0.26
	Lon Wright	0.72	0.88	0.86	0.92	0.61	0.56	0.58	0.46	0.48	0.49	0.44	0.45	0.47	0.47	0.56	0.92	0.44	0.36
	NE City 1	0.80	0.92	0.70	0.79	0.72	0.76	0.53	0.71	0.67	0.68	0.63	0.62	0.70	0.73	0.70	0.92	0.53	0.22
	Platte 1		0.98	0.75	0.66	0.65	0.64	0.84	0.72	0.66	0.60	0.62	0.53	0.53	0.59	0.65	0.98	0.53	0.32
Weighted Average		0.87	0.83	0.73	0.71	0.71	0.67	0.68	0.67	0.64	0.64	0.62	0.63	0.64	0.63	0.68	4.14	0.34	3.40

		1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Sum
SO2 Tons	Ames 8	0	1,220	596	387	693	770	696	772	656	786	829	731	792	784	9,710
	CBEC 3	11,409	14,782	12,780	18,476	17,914	17,279	22,662	18,515	17,718	18,001	17,143	16,107	12,653	15,294	230,733
	Neal 3	13,955	8,879	10,284	14,894	10,327	11,563	14,504	12,419	11,071	13,073	10,076	12,818	11,459	14,084	169,405
	Neal 4	20,153	14,660	16,325	18,527	19,025	18,675	16,223	17,638	14,973	16,105	15,617	14,907	14,950	14,165	231,942
	Lansing 4	7,666	4,011	4,092	3,109	3,208	2,920	4,979	6,882	5,701	4,489	3,604	3,917	4,633	5,060	64,270
	Louisa 101	0	7,718	11,388	13,213	17,274	16,166	17,640	16,466	14,779	14,304	15,901	13,974	16,725	12,326	187,874
	Ottumwa 1	0	12,192	13,110	18,601	17,773	16,277	20,198	18,392	18,415	17,276	15,980	18,464	16,093	11,977	214,748
	LaCygne 2		12,979	18,868	22,284	21,266	11,303	18,915	19,013	20,983	20,309	19,355	20,606	20,694	20,974	247,549
	Nearman 1	0	6,290	5,663	6,501	5,841	6,620	7,739	6,355	7,596	8,388	7,625	8,727	8,024	7,242	92,611
	Iatan 1	11,886	16,174	15,394	19,289	18,713	17,927	19,296	17,397	13,430	16,283	14,856	18,400	19,219	19,217	237,482
	GG 1	9,326	8,176	9,354	14,545	13,492	11,643	11,167	10,698	9,604	16,694	15,681	16,613	15,453	14,001	176,446
	GG 2	0	12,135	11,677	13,417	12,534	11,237	11,917	10,806	12,988	14,603	16,471	14,476	16,582	14,170	173,014
	Whelan 1	0	1,052	656	1,558	2,072	1,700	1,894	2,251	2,164	2,008	2,007	2,152	2,352	2,563	24,429
	Lon Wright	989	1,244	1,244	969	914	1,086	928	987	841	1,088	978	1,017	1,181	1,332	14,798
	NE City 1	8,757	11,444	11,230	17,138	13,469	12,233	12,832	17,697	15,227	16,206	12,820	15,052	15,593	17,550	197,247
	Platte 1	0	1,521	1,779	1,729	2,213	2,004	2,782	2,564	2,497	2,436	2,250	2,194	2,158	2,476	28,603
Sum		84,141	134,477	144,440	184,637	176,727	159,403	184,372	178,852	168,642	182,049	171,192	180,154	178,560	173,216	2,300,862

		1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Sum
Heat Input	Ames 8	0	2,174,451	2,920,755	1,928,456	3,275,676	3,539,724	3,848,677	4,257,355	3,465,327	4,559,244	4,668,367	4,325,846	4,614,100	4,647,573	48,225,551
	CBEC 3	33,415,067	34,693,600	38,779,014	48,493,286	51,489,851	47,263,735	56,398,862	49,979,382	51,996,320	55,491,695	52,962,126	54,710,494	48,280,512	55,832,515	679,786,459
	Neal 3	24,760,176	13,465,981	28,297,622	35,708,260	28,253,590	31,773,385	40,046,979	36,609,523	33,331,686	36,366,602	29,860,020	36,374,200	32,098,443	41,315,851	448,262,318
	Neal 4	35,723,677	40,433,288	45,253,308	51,906,380	49,134,775	48,865,106	41,961,014	48,430,272	45,750,910	45,264,970	46,184,489	40,179,828	47,244,408	42,093,247	628,425,672
	Lansing 4	13,178,260	11,541,000	12,211,136	8,998,610	10,484,851	10,076,882	12,897,358	18,549,631	17,341,366	14,322,847	13,051,449	12,932,001	14,266,400	15,486,117	185,337,908
	Louisa 101	0	19,428,025	30,517,044	34,927,846	44,649,934	42,876,657	48,700,212	46,994,351	46,476,768	48,801,338	54,925,058	48,112,993	51,819,846	40,937,045	559,167,117
	Ottumwa 1	0	29,825,416	36,555,218	52,070,139	46,445,832	45,603,035	56,279,697	52,697,255	55,464,741	52,855,750	54,110,578	54,763,895	48,522,589	37,574,676	622,768,821
	LaCygne 2		27,512,272	45,230,987	63,957,738	55,415,961	30,279,155	48,739,770	52,383,662	61,530,633	56,376,554	55,983,769	59,874,983	59,766,097	57,052,244	674,103,825
	Nearman 1	0	15,360,366	15,170,225	18,144,298	17,535,364	19,715,621	20,249,849	15,052,235	20,970,307	21,537,256	18,782,214	22,531,661	20,506,619	18,870,938	244,426,953
	Iatan 1	35,899,829	42,130,380	42,744,348	53,922,368	51,830,862	47,679,197	50,507,808	46,905,347	41,421,377	52,388,339	48,359,038	57,016,403	55,081,257	52,746,059	678,632,612
	GG 1	25,461,324	22,784,110	25,653,820	46,803,429	43,068,200	50,070,589	47,766,100	45,641,344	36,910,068	58,836,292	53,311,364	59,639,515	51,456,566	56,736,780	624,139,501
	GG 2	0	33,454,441	32,393,500	44,180,936	40,499,998	47,170,836	46,826,700	46,312,978	52,392,994	50,999,608	57,940,211	53,919,191	56,828,555	53,378,729	616,298,677
	Whelan 1	0	2,304,761	2,616,556	5,985,310	6,097,107	5,393,551	5,956,163	6,227,080	6,766,352	6,621,829	6,024,409	6,562,721	6,827,668	6,911,747	74,295,254
	Lon Wright	2,743,950	2,820,150	2,884,299	2,101,794	2,998,353	3,891,921	3,224,196	4,292,952	3,514,086	4,480,941	4,475,420	4,499,446	5,061,937	5,626,441	52,615,886
	NE City 1	21,840,893	24,868,328	32,252,616	43,336,246	37,192,515	32,265,486	48,373,096	49,520,464	45,168,470	47,859,791	40,902,362	48,405,745	44,426,103	48,402,870	564,814,985
	Platte 1	0	3,120,000	4,748,344	5,249,669	6,791,756	6,218,873	6,609,078	7,124,489	7,612,963	8,118,457	7,255,057	8,234,073	8,181,207	8,397,149	87,661,115
Sum		193,023,176	325,916,569	398,228,792	517,714,765	495,164,625	472,683,753	538,385,559	530,978,320	530,114,368	564,881,513	548,795,931	572,082,995	554,982,307	546,009,981	6,788,962,654

Attachment C
SO_2 Emissions at Public Power Plants in Region 7

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
IA	Ames	1122	8	1997	1	87	0.44				
IA	Ames	1122	8	1997	2	69	0.44				
IA	Ames	1122	8	1997	3	28	0.39				
IA	Ames	1122	8	1997	4	68	0.51				
IA	Ames	1122	8	1997	5	96	0.48				
IA	Ames	1122	8	1997	6	71	0.46				
IA	Ames	1122	8	1997	7	82	0.39				
IA	Ames	1122	8	1997	8	82	0.43				
IA	Ames	1122	8	1997	9	71	0.41				
IA	Ames	1122	8	1997	10	79	0.44				
IA	Ames	1122	8	1997	11	37	0.39				
IA	Ames	1122	8	1997	12		-	0.44	0.51	0.39	0.07
IA	Ames	1122	8	1998	1	7	0.36				
IA	Ames	1122	8	1998	2	45	0.33				
IA	Ames	1122	8	1998	3	75	0.35				
IA	Ames	1122	8	1998	4	39	0.34				
IA	Ames	1122	8	1998	5	45	0.36				
IA	Ames	1122	8	1998	6	74	0.37				
IA	Ames	1122	8	1998	7	83	0.37				
IA	Ames	1122	8	1998	8	77	0.36				
IA	Ames	1122	8	1998	9	53	0.40				
IA	Ames	1122	8	1998	10	66	0.36				
IA	Ames	1122	8	1998	11	61	0.36				
IA	Ames	1122	8	1998	12	71	0.35	0.36	0.40	0.33	0.04
IA	Ames	1122	8	1999	1	58	0.36				
IA	Ames	1122	8	1999	2	64	0.36				
IA	Ames	1122	8	1999	3	53	0.35				
IA	Ames	1122	8	1999	4	81	0.37				
IA	Ames	1122	8	1999	5	18	0.35				
IA	Ames	1122	8	1999	6	77	0.35				
IA	Ames	1122	8	1999	7	86	0.36				
IA	Ames	1122	8	1999	8	83	0.37				
IA	Ames	1122	8	1999	9	69	0.35				
IA	Ames	1122	8	1999	10	51	0.36				
IA	Ames	1122	8	1999	11	47	0.38				
IA	Ames	1122	8	1999	12	86	0.38	0.36	0.38	0.35	0.02
IA	Ames	1122	8	2000	1	99	0.42				
IA	Ames	1122	8	2000	2	88	0.39				
IA	Ames	1122	8	2000	3	93	0.36				
IA	Ames	1122	8	2000	4	20	0.38				
IA	Ames	1122	8	2000	5		-				
IA	Ames	1122	8	2000	6	46	0.38				
IA	Ames	1122	8	2000	7	81	0.41				
IA	Ames	1122	8	2000	8	79	0.37				
IA	Ames	1122	8	2000	9	76	0.37				
IA	Ames	1122	8	2000	10	68	0.34				
IA	Ames	1122	8	2000	11		-				
IA	Ames	1122	8	2000	12	7	0.32	0.38	0.42	0.32	0.06
IA	Ames	1122	8	2001	1	76	0.36				
IA	Ames	1122	8	2001	2	76	0.33				
IA	Ames	1122	8	2001	3	93	0.36				
IA	Ames	1122	8	2001	4	77	0.35				
IA	Ames	1122	8	2001	5	78	0.33				
IA	Ames	1122	8	2001	6	47	0.32				
IA	Ames	1122	8	2001	7	66	0.35				
IA	Ames	1122	8	2001	8	66	0.34				
IA	Ames	1122	8	2001	9	68	0.33				
IA	Ames	1122	8	2001	10	72	0.36				
IA	Ames	1122	8	2001	11	43	0.34				
IA	Ames	1122	8	2001	12	26	0.33	0.34	0.36	0.32	0.02
IA	Ames	1122	8	2002	1	72	0.34				
IA	Ames	1122	8	2002	2	63	0.35				
IA	Ames	1122	8	2002	3	64	0.37				
IA	Ames	1122	8	2002	4	75	0.37				
IA	Ames	1122	8	2002	5	61	0.38				
IA	Ames	1122	8	2002	6	76	0.37				
IA	Ames	1122	8	2002	7	74	0.38				
IA	Ames	1122	8	2002	8	74	0.36				
IA	Ames	1122	8	2002	9	71	0.35				
IA	Ames	1122	8	2002	10	65	0.34				
IA	Ames	1122	8	2002	11	62	0.34				
IA	Ames	1122	8	2002	12	71	0.34	0.36	0.38	0.34	0.02
IA	Ames	1122	8	2003	1	78	0.34				
IA	Ames	1122	8	2003	2	76	0.34				
IA	Ames	1122	8	2003	3	51	0.34				
IA	Ames	1122	8	2003	4	2	0.32				
IA	Ames	1122	8	2003	5	66	0.35				
IA	Ames	1122	8	2003	6	65	0.36				
IA	Ames	1122	8	2003	7	68	0.36				
IA	Ames	1122	8	2003	8	70	0.30				
IA	Ames	1122	8	2003	9	70	0.31				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
IA	Ames	1122	8	2003	10	64	0.33				
IA	Ames	1122	8	2003	11	39	0.36				
IA	Ames	1122	8	2003	12	82	0.36	0.34	0.36	0.30	0.04
IA	Ames	1122	8	2004	1	76	0.30				
IA	Ames	1122	8	2004	2	61	0.34				
IA	Ames	1122	8	2004	3	97	0.37				
IA	Ames	1122	8	2004	4	5	0.33				
IA	Ames	1122	8	2004	5	65	0.34				
IA	Ames	1122	8	2004	6	70	0.34				
IA	Ames	1122	8	2004	7	83	0.37				
IA	Ames	1122	8	2004	8	72	0.32				
IA	Ames	1122	8	2004	9	77	0.38				
IA	Ames	1122	8	2004	10	62	0.39				
IA	Ames	1122	8	2004	11	49	0.30				
IA	Ames	1122	8	2004	12	74	0.33	0.34	0.39	0.30	0.05
IA	Ames	1122	8	2005	1	82	0.33				
IA	Ames	1122	8	2005	2	67	0.34				
IA	Ames	1122	8	2005	3	81	0.33				
IA	Ames	1122	8	2005	4	2	0.32				
IA	Ames	1122	8	2005	5	60	0.38				
IA	Ames	1122	8	2005	6	82	0.36				
IA	Ames	1122	8	2005	7	83	0.35				
IA	Ames	1122	8	2005	8	78	0.31				
IA	Ames	1122	8	2005	9	75	0.33				
IA	Ames	1122	8	2005	10	65	0.32				
IA	Ames	1122	8	2005	11	38	0.33				
IA	Ames	1122	8	2005	12	72	0.34	0.34	0.38	0.31	0.04
KS	Nearman Creek	6064	N1	1997	1	517	0.65				
KS	Nearman Creek	6064	N1	1997	2	464	0.64				
KS	Nearman Creek	6064	N1	1997	3	426	0.63				
KS	Nearman Creek	6064	N1	1997	4	605	0.68				
KS	Nearman Creek	6064	N1	1997	5	311	0.74				
KS	Nearman Creek	6064	N1	1997	6	589	0.67				
KS	Nearman Creek	6064	N1	1997	7	587	0.63				
KS	Nearman Creek	6064	N1	1997	8	527	0.52				
KS	Nearman Creek	6064	N1	1997	9	683	0.74				
KS	Nearman Creek	6064	N1	1997	10	664	0.76				
KS	Nearman Creek	6064	N1	1997	11	611	0.75				
KS	Nearman Creek	6064	N1	1997	12	636	0.70	0.67	0.76	0.52	0.15
KS	Nearman Creek	6064	N1	1998	1	582	0.70				
KS	Nearman Creek	6064	N1	1998	2	639	0.75				
KS	Nearman Creek	6064	N1	1998	3	662	0.71				
KS	Nearman Creek	6064	N1	1998	4	783	0.81				
KS	Nearman Creek	6064	N1	1998	5	313	0.81				
KS	Nearman Creek	6064	N1	1998	6	714	0.77				
KS	Nearman Creek	6064	N1	1998	7	761	0.76				
KS	Nearman Creek	6064	N1	1998	8	480	0.72				
KS	Nearman Creek	6064	N1	1998	9	733	0.79				
KS	Nearman Creek	6064	N1	1998	10	659	0.82				
KS	Nearman Creek	6064	N1	1998	11	723	0.77				
KS	Nearman Creek	6064	N1	1998	12	689	0.75	0.76	0.82	0.70	0.06
KS	Nearman Creek	6064	N1	1999	1	743	0.82				
KS	Nearman Creek	6064	N1	1999	2	668	0.84				
KS	Nearman Creek	6064	N1	1999	3	633	0.84				
KS	Nearman Creek	6064	N1	1999	4		-				
KS	Nearman Creek	6064	N1	1999	5	387	1.25				
KS	Nearman Creek	6064	N1	1999	6	648	0.88				
KS	Nearman Creek	6064	N1	1999	7	500	0.89				
KS	Nearman Creek	6064	N1	1999	8	407	0.96				
KS	Nearman Creek	6064	N1	1999	9	335	0.80				
KS	Nearman Creek	6064	N1	1999	10	680	0.78				
KS	Nearman Creek	6064	N1	1999	11	662	0.78				
KS	Nearman Creek	6064	N1	1999	12	691	0.77	0.84	1.25	0.77	0.41
KS	Nearman Creek	6064	N1	2000	1	545	0.73				
KS	Nearman Creek	6064	N1	2000	2	393	0.66				
KS	Nearman Creek	6064	N1	2000	3	597	0.72				
KS	Nearman Creek	6064	N1	2000	4	664	0.66				
KS	Nearman Creek	6064	N1	2000	5	351	0.68				
KS	Nearman Creek	6064	N1	2000	6	681	0.70				
KS	Nearman Creek	6064	N1	2000	7	763	0.72				
KS	Nearman Creek	6064	N1	2000	8	806	0.74				
KS	Nearman Creek	6064	N1	2000	9	754	0.76				
KS	Nearman Creek	6064	N1	2000	10	791	0.78				
KS	Nearman Creek	6064	N1	2000	11	739	0.78				
KS	Nearman Creek	6064	N1	2000	12	511	0.70	0.72	0.78	0.66	0.06
KS	Nearman Creek	6064	N1	2001	1	802	0.75				
KS	Nearman Creek	6064	N1	2001	2	654	0.78				
KS	Nearman Creek	6064	N1	2001	3	804	0.74				
KS	Nearman Creek	6064	N1	2001	4	740	0.76				
KS	Nearman Creek	6064	N1	2001	5	415	0.73				
KS	Nearman Creek	6064	N1	2001	6	689	0.74				

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KS	Nearman Creek	6064	N1	2001	7	721	0.78				
KS	Nearman Creek	6064	N1	2001	8	708	0.79				
KS	Nearman Creek	6064	N1	2001	9	764	0.82				
KS	Nearman Creek	6064	N1	2001	10	592	0.80				
KS	Nearman Creek	6064	N1	2001	11	715	0.82				
KS	Nearman Creek	6064	N1	2001	12	783	0.84	0.78	0.84	0.73	0.06
KS	Nearman Creek	6064	N1	2002	1	762	0.79				
KS	Nearman Creek	6064	N1	2002	2	671	0.87				
KS	Nearman Creek	6064	N1	2002	3	704	0.80				
KS	Nearman Creek	6064	N1	2002	4	229	0.77				
KS	Nearman Creek	6064	N1	2002	5	735	0.82				
KS	Nearman Creek	6064	N1	2002	6	708	0.82				
KS	Nearman Creek	6064	N1	2002	7	742	0.81				
KS	Nearman Creek	6064	N1	2002	8	741	0.82				
KS	Nearman Creek	6064	N1	2002	9	702	0.80				
KS	Nearman Creek	6064	N1	2002	10	722	0.81				
KS	Nearman Creek	6064	N1	2002	11	179	0.78				
KS	Nearman Creek	6064	N1	2002	12	729	0.82	0.81	0.87	0.77	0.05
KS	Nearman Creek	6064	N1	2003	1	705	0.76				
KS	Nearman Creek	6064	N1	2003	2	761	0.85				
KS	Nearman Creek	6064	N1	2003	3	556	0.85				
KS	Nearman Creek	6064	N1	2003	4	567	0.71				
KS	Nearman Creek	6064	N1	2003	5	837	0.81				
KS	Nearman Creek	6064	N1	2003	6	686	0.82				
KS	Nearman Creek	6064	N1	2003	7	832	0.77				
KS	Nearman Creek	6064	N1	2003	8	838	0.76				
KS	Nearman Creek	6064	N1	2003	9	800	0.76				
KS	Nearman Creek	6064	N1	2003	10	576	0.76				
KS	Nearman Creek	6064	N1	2003	11	716	0.72				
KS	Nearman Creek	6064	N1	2003	12	854	0.76	0.77	0.85	0.71	0.07
KS	Nearman Creek	6064	N1	2004	1	794	0.81				
KS	Nearman Creek	6064	N1	2004	2	786	0.83				
KS	Nearman Creek	6064	N1	2004	3	818	0.84				
KS	Nearman Creek	6064	N1	2004	4	273	0.76				
KS	Nearman Creek	6064	N1	2004	5	760	0.79				
KS	Nearman Creek	6064	N1	2004	6	665	0.74				
KS	Nearman Creek	6064	N1	2004	7	572	0.76				
KS	Nearman Creek	6064	N1	2004	8	577	0.81				
KS	Nearman Creek	6064	N1	2004	9	658	0.81				
KS	Nearman Creek	6064	N1	2004	10	777	0.77				
KS	Nearman Creek	6064	N1	2004	11	658	0.74				
KS	Nearman Creek	6064	N1	2004	12	686	0.72	0.78	0.84	0.72	0.07
KS	Nearman Creek	6064	N1	2005	1	743	0.75				
KS	Nearman Creek	6064	N1	2005	2	435	0.79				
KS	Nearman Creek	6064	N1	2005	3	563	0.75				
KS	Nearman Creek	6064	N1	2005	4	342	0.82				
KS	Nearman Creek	6064	N1	2005	5	560	0.82				
KS	Nearman Creek	6064	N1	2005	6	841	0.81				
KS	Nearman Creek	6064	N1	2005	7	760	0.75				
KS	Nearman Creek	6064	N1	2005	8	680	0.74				
KS	Nearman Creek	6064	N1	2005	9	688	0.80				
KS	Nearman Creek	6064	N1	2005	10	480	0.75				
KS	Nearman Creek	6064	N1	2005	11	498	0.72				
KS	Nearman Creek	6064	N1	2005	12	653	0.74	0.77	0.82	0.72	0.05
NE	Gerald Gentleman Station	6077	1	1997	1	1186	0.50				
NE	Gerald Gentleman Station	6077	1	1997	2	1041	0.45				
NE	Gerald Gentleman Station	6077	1	1997	3	849	0.42				
NE	Gerald Gentleman Station	6077	1	1997	4	1122	0.45				
NE	Gerald Gentleman Station	6077	1	1997	5	922	0.45				
NE	Gerald Gentleman Station	6077	1	1997	6	1022	0.48				
NE	Gerald Gentleman Station	6077	1	1997	7	989	0.47				
NE	Gerald Gentleman Station	6077	1	1997	8	886	0.48				
NE	Gerald Gentleman Station	6077	1	1997	9	979	0.50				
NE	Gerald Gentleman Station	6077	1	1997	10	856	0.47				
NE	Gerald Gentleman Station	6077	1	1997	11	957	0.47				
NE	Gerald Gentleman Station	6077	1	1997	12	836	0.46	0.47	0.50	0.42	0.05
NE	Gerald Gentleman Station	6077	1	1998	1	803	0.45				
NE	Gerald Gentleman Station	6077	1	1998	2	974	0.49				
NE	Gerald Gentleman Station	6077	1	1998	3	646	0.45				
NE	Gerald Gentleman Station	6077	1	1998	4	870	0.50				
NE	Gerald Gentleman Station	6077	1	1998	5	861	0.43				
NE	Gerald Gentleman Station	6077	1	1998	6	998	0.46				
NE	Gerald Gentleman Station	6077	1	1998	7	887	0.44				
NE	Gerald Gentleman Station	6077	1	1998	8	1140	0.51				
NE	Gerald Gentleman Station	6077	1	1998	9	885	0.46				
NE	Gerald Gentleman Station	6077	1	1998	10	1168	0.50				
NE	Gerald Gentleman Station	6077	1	1998	11	960	0.47				
NE	Gerald Gentleman Station	6077	1	1998	12	976	0.44	0.47	0.51	0.43	0.05
NE	Gerald Gentleman Station	6077	1	1999	1	934	0.47				
NE	Gerald Gentleman Station	6077	1	1999	2	872	0.43				
NE	Gerald Gentleman Station	6077	1	1999	3	135	0.36				

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NE	Gerald Gentleman Station	6077	1	1999	4	797	0.40				
NE	Gerald Gentleman Station	6077	1	1999	5	814	0.40				
NE	Gerald Gentleman Station	6077	1	1999	6	930	0.47				
NE	Gerald Gentleman Station	6077	1	1999	7	1190	0.49				
NE	Gerald Gentleman Station	6077	1	1999	8	1088	0.48				
NE	Gerald Gentleman Station	6077	1	1999	9	800	0.44				
NE	Gerald Gentleman Station	6077	1	1999	10	1056	0.54				
NE	Gerald Gentleman Station	6077	1	1999	11	1075	0.57				
NE	Gerald Gentleman Station	6077	1	1999	12	1008	0.49	0.47	0.57	0.36	0.11
NE	Gerald Gentleman Station	6077	1	2000	1	989	0.56				
NE	Gerald Gentleman Station	6077	1	2000	2	965	0.55				
NE	Gerald Gentleman Station	6077	1	2000	3	1130	0.53				
NE	Gerald Gentleman Station	6077	1	2000	4	945	0.54				
NE	Gerald Gentleman Station	6077	1	2000	5	1060	0.52				
NE	Gerald Gentleman Station	6077	1	2000	6	917	0.54				
NE	Gerald Gentleman Station	6077	1	2000	7	852	0.42				
NE	Gerald Gentleman Station	6077	1	2000	8	1030	0.50				
NE	Gerald Gentleman Station	6077	1	2000	9	403	0.47				
NE	Gerald Gentleman Station	6077	1	2000	10		-				
NE	Gerald Gentleman Station	6077	1	2000	11	0	0.02				
NE	Gerald Gentleman Station	6077	1	2000	12	1313	0.56	0.52	0.56	0.02	0.50
NE	Gerald Gentleman Station	6077	1	2001	1	1538	0.56				
NE	Gerald Gentleman Station	6077	1	2001	2	1393	0.55				
NE	Gerald Gentleman Station	6077	1	2001	3	1543	0.56				
NE	Gerald Gentleman Station	6077	1	2001	4	1421	0.54				
NE	Gerald Gentleman Station	6077	1	2001	5	1442	0.56				
NE	Gerald Gentleman Station	6077	1	2001	6	1391	0.58				
NE	Gerald Gentleman Station	6077	1	2001	7	1423	0.54				
NE	Gerald Gentleman Station	6077	1	2001	8	1456	0.58				
NE	Gerald Gentleman Station	6077	1	2001	9	1271	0.58				
NE	Gerald Gentleman Station	6077	1	2001	10	967	0.66				
NE	Gerald Gentleman Station	6077	1	2001	11	1412	0.59				
NE	Gerald Gentleman Station	6077	1	2001	12	1438	0.56	0.57	0.66	0.54	0.09
NE	Gerald Gentleman Station	6077	1	2002	1	1526	0.60				
NE	Gerald Gentleman Station	6077	1	2002	2	1414	0.62				
NE	Gerald Gentleman Station	6077	1	2002	3	1531	0.60				
NE	Gerald Gentleman Station	6077	1	2002	4	1495	0.61				
NE	Gerald Gentleman Station	6077	1	2002	5	1398	0.60				
NE	Gerald Gentleman Station	6077	1	2002	6	1408	0.60				
NE	Gerald Gentleman Station	6077	1	2002	7	1486	0.57				
NE	Gerald Gentleman Station	6077	1	2002	8	1359	0.55				
NE	Gerald Gentleman Station	6077	1	2002	9	942	0.59				
NE	Gerald Gentleman Station	6077	1	2002	10	512	0.59				
NE	Gerald Gentleman Station	6077	1	2002	11	1344	0.58				
NE	Gerald Gentleman Station	6077	1	2002	12	1266	0.56	0.59	0.62	0.55	0.04
NE	Gerald Gentleman Station	6077	1	2003	1	1491	0.57				
NE	Gerald Gentleman Station	6077	1	2003	2	1207	0.53				
NE	Gerald Gentleman Station	6077	1	2003	3	1453	0.55				
NE	Gerald Gentleman Station	6077	1	2003	4	1368	0.54				
NE	Gerald Gentleman Station	6077	1	2003	5	1496	0.59				
NE	Gerald Gentleman Station	6077	1	2003	6	1357	0.55				
NE	Gerald Gentleman Station	6077	1	2003	7	1375	0.54				
NE	Gerald Gentleman Station	6077	1	2003	8	1330	0.57				
NE	Gerald Gentleman Station	6077	1	2003	9	1422	0.58				
NE	Gerald Gentleman Station	6077	1	2003	10	1337	0.54				
NE	Gerald Gentleman Station	6077	1	2003	11	1300	0.56				
NE	Gerald Gentleman Station	6077	1	2003	12	1477	0.58	0.56	0.59	0.53	0.03
NE	Gerald Gentleman Station	6077	1	2004	1	1495	0.60				
NE	Gerald Gentleman Station	6077	1	2004	2	1433	0.59				
NE	Gerald Gentleman Station	6077	1	2004	3	577	0.61				
NE	Gerald Gentleman Station	6077	1	2004	4	550	0.60				
NE	Gerald Gentleman Station	6077	1	2004	5	1488	0.60				
NE	Gerald Gentleman Station	6077	1	2004	6	1378	0.64				
NE	Gerald Gentleman Station	6077	1	2004	7	1534	0.64				
NE	Gerald Gentleman Station	6077	1	2004	8	1519	0.60				
NE	Gerald Gentleman Station	6077	1	2004	9	1323	0.61				
NE	Gerald Gentleman Station	6077	1	2004	10	1237	0.57				
NE	Gerald Gentleman Station	6077	1	2004	11	1414	0.57				
NE	Gerald Gentleman Station	6077	1	2004	12	1505	0.58	0.60	0.64	0.57	0.04
NE	Gerald Gentleman Station	6077	1	2005	1	1329	0.51				
NE	Gerald Gentleman Station	6077	1	2005	2	978	0.41				
NE	Gerald Gentleman Station	6077	1	2005	3	862	0.33				
NE	Gerald Gentleman Station	6077	1	2005	4	576	0.52				
NE	Gerald Gentleman Station	6077	1	2005	5	1389	0.53				
NE	Gerald Gentleman Station	6077	1	2005	6	1125	0.54				
NE	Gerald Gentleman Station	6077	1	2005	7	1353	0.53				
NE	Gerald Gentleman Station	6077	1	2005	8	1248	0.51				
NE	Gerald Gentleman Station	6077	1	2005	9	1279	0.53				
NE	Gerald Gentleman Station	6077	1	2005	10	1245	0.52				
NE	Gerald Gentleman Station	6077	1	2005	11	1297	0.52				
NE	Gerald Gentleman Station	6077	1	2005	12	1320	0.50	0.49	0.54	0.33	0.16

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NE	Gerald Gentleman Station	6077	2	1997	1	1044	0.46				
NE	Gerald Gentleman Station	6077	2	1997	2	761	0.46				
NE	Gerald Gentleman Station	6077	2	1997	3	930	0.42				
NE	Gerald Gentleman Station	6077	2	1997	4	974	0.44				
NE	Gerald Gentleman Station	6077	2	1997	5	752	0.47				
NE	Gerald Gentleman Station	6077	2	1997	6	741	0.46				
NE	Gerald Gentleman Station	6077	2	1997	7	1056	0.46				
NE	Gerald Gentleman Station	6077	2	1997	8	909	0.46				
NE	Gerald Gentleman Station	6077	2	1997	9	819	0.51				
NE	Gerald Gentleman Station	6077	2	1997	10	995	0.56				
NE	Gerald Gentleman Station	6077	2	1997	11	1121	0.54				
NE	Gerald Gentleman Station	6077	2	1997	12	1137	0.50	0.48	0.56	0.42	0.08
NE	Gerald Gentleman Station	6077	2	1998	1	928	0.46				
NE	Gerald Gentleman Station	6077	2	1998	2	959	0.49				
NE	Gerald Gentleman Station	6077	2	1998	3	946	0.51				
NE	Gerald Gentleman Station	6077	2	1998	4	935	0.53				
NE	Gerald Gentleman Station	6077	2	1998	5	1096	0.51				
NE	Gerald Gentleman Station	6077	2	1998	6	940	0.52				
NE	Gerald Gentleman Station	6077	2	1998	7	1090	0.51				
NE	Gerald Gentleman Station	6077	2	1998	8	1064	0.56				
NE	Gerald Gentleman Station	6077	2	1998	9	590	0.50				
NE	Gerald Gentleman Station	6077	2	1998	10	1069	0.50				
NE	Gerald Gentleman Station	6077	2	1998	11	1129	0.53				
NE	Gerald Gentleman Station	6077	2	1998	12	1171	0.49	0.51	0.56	0.46	0.05
NE	Gerald Gentleman Station	6077	2	1999	1	1070	0.48				
NE	Gerald Gentleman Station	6077	2	1999	2	890	0.43				
NE	Gerald Gentleman Station	6077	2	1999	3	1197	0.50				
NE	Gerald Gentleman Station	6077	2	1999	4	65	0.45				
NE	Gerald Gentleman Station	6077	2	1999	5	363	0.41				
NE	Gerald Gentleman Station	6077	2	1999	6	985	0.51				
NE	Gerald Gentleman Station	6077	2	1999	7	1235	0.49				
NE	Gerald Gentleman Station	6077	2	1999	8	1082	0.46				
NE	Gerald Gentleman Station	6077	2	1999	9	797	0.44				
NE	Gerald Gentleman Station	6077	2	1999	10	1019	0.45				
NE	Gerald Gentleman Station	6077	2	1999	11	1017	0.46				
NE	Gerald Gentleman Station	6077	2	1999	12	1085	0.46	0.47	0.51	0.41	0.05
NE	Gerald Gentleman Station	6077	2	2000	1	1231	0.52				
NE	Gerald Gentleman Station	6077	2	2000	2	903	0.48				
NE	Gerald Gentleman Station	6077	2	2000	3	1367	0.57				
NE	Gerald Gentleman Station	6077	2	2000	4	1308	0.57				
NE	Gerald Gentleman Station	6077	2	2000	5	1241	0.52				
NE	Gerald Gentleman Station	6077	2	2000	6	852	0.49				
NE	Gerald Gentleman Station	6077	2	2000	7	1203	0.49				
NE	Gerald Gentleman Station	6077	2	2000	8	1220	0.50				
NE	Gerald Gentleman Station	6077	2	2000	9	945	0.50				
NE	Gerald Gentleman Station	6077	2	2000	10	1198	0.52				
NE	Gerald Gentleman Station	6077	2	2000	11	899	0.40				
NE	Gerald Gentleman Station	6077	2	2000	12	621	0.34	0.50	0.57	0.34	0.16
NE	Gerald Gentleman Station	6077	2	2001	1	1343	0.55				
NE	Gerald Gentleman Station	6077	2	2001	2	1075	0.57				
NE	Gerald Gentleman Station	6077	2	2001	3	1392	0.60				
NE	Gerald Gentleman Station	6077	2	2001	4		-				
NE	Gerald Gentleman Station	6077	2	2001	5	856	0.56				
NE	Gerald Gentleman Station	6077	2	2001	6	1281	0.57				
NE	Gerald Gentleman Station	6077	2	2001	7	1349	0.52				
NE	Gerald Gentleman Station	6077	2	2001	8	1465	0.56				
NE	Gerald Gentleman Station	6077	2	2001	9	1371	0.58				
NE	Gerald Gentleman Station	6077	2	2001	10	1532	0.61				
NE	Gerald Gentleman Station	6077	2	2001	11	1431	0.59				
NE	Gerald Gentleman Station	6077	2	2001	12	1507	0.58	0.57	0.61	0.52	0.06
NE	Gerald Gentleman Station	6077	2	2002	1	1549	0.60				
NE	Gerald Gentleman Station	6077	2	2002	2	1399	0.61				
NE	Gerald Gentleman Station	6077	2	2002	3	1532	0.59				
NE	Gerald Gentleman Station	6077	2	2002	4	1449	0.59				
NE	Gerald Gentleman Station	6077	2	2002	5	681	0.59				
NE	Gerald Gentleman Station	6077	2	2002	6	1383	0.59				
NE	Gerald Gentleman Station	6077	2	2002	7	1497	0.56				
NE	Gerald Gentleman Station	6077	2	2002	8	1374	0.55				
NE	Gerald Gentleman Station	6077	2	2002	9	1348	0.54				
NE	Gerald Gentleman Station	6077	2	2002	10	1372	0.53				
NE	Gerald Gentleman Station	6077	2	2002	11	1435	0.55				
NE	Gerald Gentleman Station	6077	2	2002	12	1453	0.54	0.57	0.61	0.53	0.04
NE	Gerald Gentleman Station	6077	2	2003	1	1368	0.53				
NE	Gerald Gentleman Station	6077	2	2003	2	1146	0.49				
NE	Gerald Gentleman Station	6077	2	2003	3	1210	0.50				
NE	Gerald Gentleman Station	6077	2	2003	4	769	0.51				
NE	Gerald Gentleman Station	6077	2	2003	5	111	0.43				
NE	Gerald Gentleman Station	6077	2	2003	6	1297	0.54				
NE	Gerald Gentleman Station	6077	2	2003	7	1379	0.54				
NE	Gerald Gentleman Station	6077	2	2003	8	1458	0.56				
NE	Gerald Gentleman Station	6077	2	2003	9	1427	0.58				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Gerald Gentleman Station	6077	2	2003	10	1395	0.53				
NE	Gerald Gentleman Station	6077	2	2003	11	1462	0.57				
NE	Gerald Gentleman Station	6077	2	2003	12	1453	0.55	0.54	0.58	0.43	0.10
NE	Gerald Gentleman Station	6077	2	2004	1	1561	0.59				
NE	Gerald Gentleman Station	6077	2	2004	2	1244	0.56				
NE	Gerald Gentleman Station	6077	2	2004	3	1492	0.59				
NE	Gerald Gentleman Station	6077	2	2004	4	1550	0.62				
NE	Gerald Gentleman Station	6077	2	2004	5	885	0.56				
NE	Gerald Gentleman Station	6077	2	2004	6	1040	0.59				
NE	Gerald Gentleman Station	6077	2	2004	7	1239	0.61				
NE	Gerald Gentleman Station	6077	2	2004	8	1538	0.58				
NE	Gerald Gentleman Station	6077	2	2004	9	1406	0.57				
NE	Gerald Gentleman Station	6077	2	2004	10	1540	0.57				
NE	Gerald Gentleman Station	6077	2	2004	11	1490	0.57				
NE	Gerald Gentleman Station	6077	2	2004	12	1597	0.59	0.58	0.62	0.56	0.03
NE	Gerald Gentleman Station	6077	2	2005	1	1450	0.57				
NE	Gerald Gentleman Station	6077	2	2005	2	1316	0.53				
NE	Gerald Gentleman Station	6077	2	2005	3	1437	0.54				
NE	Gerald Gentleman Station	6077	2	2005	4	1262	0.52				
NE	Gerald Gentleman Station	6077	2	2005	5		-				
NE	Gerald Gentleman Station	6077	2	2005	6	740	0.51				
NE	Gerald Gentleman Station	6077	2	2005	7	1421	0.53				
NE	Gerald Gentleman Station	6077	2	2005	8	1305	0.53				
NE	Gerald Gentleman Station	6077	2	2005	9	1289	0.54				
NE	Gerald Gentleman Station	6077	2	2005	10	1357	0.54				
NE	Gerald Gentleman Station	6077	2	2005	11	1262	0.53				
NE	Gerald Gentleman Station	6077	2	2005	12	1332	0.49	0.53	0.57	0.49	0.04
NE	Gerald Whelan Energy Center	60	1	1997	1	168	0.56				
NE	Gerald Whelan Energy Center	60	1	1997	2	143	0.54				
NE	Gerald Whelan Energy Center	60	1	1997	3	65	0.56				
NE	Gerald Whelan Energy Center	60	1	1997	4	0	1.95				
NE	Gerald Whelan Energy Center	60	1	1997	5	101	0.50				
NE	Gerald Whelan Energy Center	60	1	1997	6	159	0.65				
NE	Gerald Whelan Energy Center	60	1	1997	7	198	0.64				
NE	Gerald Whelan Energy Center	60	1	1997	8	194	0.68				
NE	Gerald Whelan Energy Center	60	1	1997	9	160	0.59				
NE	Gerald Whelan Energy Center	60	1	1997	10	159	0.66				
NE	Gerald Whelan Energy Center	60	1	1997	11	172	0.75				
NE	Gerald Whelan Energy Center	60	1	1997	12	181	0.76	0.63	1.95	0.50	1.32
NE	Gerald Whelan Energy Center	60	1	1998	1	159	0.69				
NE	Gerald Whelan Energy Center	60	1	1998	2	81	0.38				
NE	Gerald Whelan Energy Center	60	1	1998	3	97	0.42				
NE	Gerald Whelan Energy Center	60	1	1998	4	42	0.43				
NE	Gerald Whelan Energy Center	60	1	1998	5	144	0.53				
NE	Gerald Whelan Energy Center	60	1	1998	6	203	0.71				
NE	Gerald Whelan Energy Center	60	1	1998	7	211	0.67				
NE	Gerald Whelan Energy Center	60	1	1998	8	217	0.71				
NE	Gerald Whelan Energy Center	60	1	1998	9	222	0.76				
NE	Gerald Whelan Energy Center	60	1	1998	10	161	0.68				
NE	Gerald Whelan Energy Center	60	1	1998	11	179	0.74				
NE	Gerald Whelan Energy Center	60	1	1998	12	178	0.70	0.64	0.76	0.38	0.25
NE	Gerald Whelan Energy Center	60	1	1999	1	198	0.73				
NE	Gerald Whelan Energy Center	60	1	1999	2	179	0.71				
NE	Gerald Whelan Energy Center	60	1	1999	3	156	0.74				
NE	Gerald Whelan Energy Center	60	1	1999	4	41	0.73				
NE	Gerald Whelan Energy Center	60	1	1999	5	207	0.74				
NE	Gerald Whelan Energy Center	60	1	1999	6	228	0.73				
NE	Gerald Whelan Energy Center	60	1	1999	7	254	0.74				
NE	Gerald Whelan Energy Center	60	1	1999	8	231	0.72				
NE	Gerald Whelan Energy Center	60	1	1999	9	194	0.72				
NE	Gerald Whelan Energy Center	60	1	1999	10	154	0.70				
NE	Gerald Whelan Energy Center	60	1	1999	11	197	0.71				
NE	Gerald Whelan Energy Center	60	1	1999	12	212	0.71	0.72	0.74	0.70	0.02
NE	Gerald Whelan Energy Center	60	1	2000	1	207	0.69				
NE	Gerald Whelan Energy Center	60	1	2000	2	201	0.70				
NE	Gerald Whelan Energy Center	60	1	2000	3	213	0.68				
NE	Gerald Whelan Energy Center	60	1	2000	4	56	0.69				
NE	Gerald Whelan Energy Center	60	1	2000	5	195	0.64				
NE	Gerald Whelan Energy Center	60	1	2000	6	192	0.64				
NE	Gerald Whelan Energy Center	60	1	2000	7	208	0.64				
NE	Gerald Whelan Energy Center	60	1	2000	8	179	0.55				
NE	Gerald Whelan Energy Center	60	1	2000	9	167	0.58				
NE	Gerald Whelan Energy Center	60	1	2000	10	155	0.63				
NE	Gerald Whelan Energy Center	60	1	2000	11	182	0.62				
NE	Gerald Whelan Energy Center	60	1	2000	12	210	0.67	0.64	0.70	0.55	0.09
NE	Gerald Whelan Energy Center	60	1	2001	1	190	0.62				
NE	Gerald Whelan Energy Center	60	1	2001	2	176	0.64				
NE	Gerald Whelan Energy Center	60	1	2001	3	187	0.64				
NE	Gerald Whelan Energy Center	60	1	2001	4	110	0.55				
NE	Gerald Whelan Energy Center	60	1	2001	5	149	0.61				
NE	Gerald Whelan Energy Center	60	1	2001	6	148	0.59				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Gerald Whelan Energy Center	60	1	2001	7	179	0.54				
NE	Gerald Whelan Energy Center	60	1	2001	8	222	0.70				
NE	Gerald Whelan Energy Center	60	1	2001	9	156	0.55				
NE	Gerald Whelan Energy Center	60	1	2001	10	153	0.63				
NE	Gerald Whelan Energy Center	60	1	2001	11	175	0.62				
NE	Gerald Whelan Energy Center	60	1	2001	12	162	0.57	0.61	0.70	0.54	0.10
NE	Gerald Whelan Energy Center	60	1	2002	1	159	0.56				
NE	Gerald Whelan Energy Center	60	1	2002	2	145	0.55				
NE	Gerald Whelan Energy Center	60	1	2002	3	76	0.52				
NE	Gerald Whelan Energy Center	60	1	2002	4	27	0.61				
NE	Gerald Whelan Energy Center	60	1	2002	5	203	0.71				
NE	Gerald Whelan Energy Center	60	1	2002	6	213	0.69				
NE	Gerald Whelan Energy Center	60	1	2002	7	241	0.75				
NE	Gerald Whelan Energy Center	60	1	2002	8	201	0.67				
NE	Gerald Whelan Energy Center	60	1	2002	9	131	0.72				
NE	Gerald Whelan Energy Center	60	1	2002	10	182	0.63				
NE	Gerald Whelan Energy Center	60	1	2002	11	201	0.69				
NE	Gerald Whelan Energy Center	60	1	2002	12	227	0.77	0.67	0.77	0.52	0.14
NE	Gerald Whelan Energy Center	60	1	2003	1	187	0.61				
NE	Gerald Whelan Energy Center	60	1	2003	2	149	0.54				
NE	Gerald Whelan Energy Center	60	1	2003	3	151	0.52				
NE	Gerald Whelan Energy Center	60	1	2003	4	46	0.48				
NE	Gerald Whelan Energy Center	60	1	2003	5	164	0.59				
NE	Gerald Whelan Energy Center	60	1	2003	6	195	0.69				
NE	Gerald Whelan Energy Center	60	1	2003	7	264	0.82				
NE	Gerald Whelan Energy Center	60	1	2003	8	240	0.77				
NE	Gerald Whelan Energy Center	60	1	2003	9	190	0.70				
NE	Gerald Whelan Energy Center	60	1	2003	10	152	0.58				
NE	Gerald Whelan Energy Center	60	1	2003	11	179	0.61				
NE	Gerald Whelan Energy Center	60	1	2003	12	237	0.81	0.66	0.82	0.48	0.18
NE	Gerald Whelan Energy Center	60	1	2004	1	218	0.74				
NE	Gerald Whelan Energy Center	60	1	2004	2	220	0.79				
NE	Gerald Whelan Energy Center	60	1	2004	3	167	0.56				
NE	Gerald Whelan Energy Center	60	1	2004	4	78	0.49				
NE	Gerald Whelan Energy Center	60	1	2004	5	200	0.66				
NE	Gerald Whelan Energy Center	60	1	2004	6	202	0.69				
NE	Gerald Whelan Energy Center	60	1	2004	7	225	0.72				
NE	Gerald Whelan Energy Center	60	1	2004	8	220	0.70				
NE	Gerald Whelan Energy Center	60	1	2004	9	205	0.71				
NE	Gerald Whelan Energy Center	60	1	2004	10	173	0.69				
NE	Gerald Whelan Energy Center	60	1	2004	11	222	0.72				
NE	Gerald Whelan Energy Center	60	1	2004	12	221	0.71	0.69	0.79	0.49	0.20
NE	Gerald Whelan Energy Center	60	1	2005	1	184	0.59				
NE	Gerald Whelan Energy Center	60	1	2005	2	232	0.84				
NE	Gerald Whelan Energy Center	60	1	2005	3	188	0.73				
NE	Gerald Whelan Energy Center	60	1	2005	4	213	0.72				
NE	Gerald Whelan Energy Center	60	1	2005	5	204	0.68				
NE	Gerald Whelan Energy Center	60	1	2005	6	232	0.76				
NE	Gerald Whelan Energy Center	60	1	2005	7	234	0.73				
NE	Gerald Whelan Energy Center	60	1	2005	8	230	0.71				
NE	Gerald Whelan Energy Center	60	1	2005	9	249	0.82				
NE	Gerald Whelan Energy Center	60	1	2005	10	99	0.74				
NE	Gerald Whelan Energy Center	60	1	2005	11	250	0.83				
NE	Gerald Whelan Energy Center	60	1	2005	12	249	0.76	0.74	0.84	0.59	0.15
NE	Lon D Wright Power Plant	2240	8	1997	1	95	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	2	101	0.61				
NE	Lon D Wright Power Plant	2240	8	1997	3	18	0.61				
NE	Lon D Wright Power Plant	2240	8	1997	4	-					
NE	Lon D Wright Power Plant	2240	8	1997	5	7	0.53				
NE	Lon D Wright Power Plant	2240	8	1997	6	113	0.57				
NE	Lon D Wright Power Plant	2240	8	1997	7	140	0.62				
NE	Lon D Wright Power Plant	2240	8	1997	8	127	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	9	131	0.52				
NE	Lon D Wright Power Plant	2240	8	1997	10	143	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	11	109	0.52				
NE	Lon D Wright Power Plant	2240	8	1997	12	101	0.52	0.56	0.62	0.52	0.06
NE	Lon D Wright Power Plant	2240	8	1998	1	60	0.52				
NE	Lon D Wright Power Plant	2240	8	1998	2	89	0.52				
NE	Lon D Wright Power Plant	2240	8	1998	3	49	0.53				
NE	Lon D Wright Power Plant	2240	8	1998	4	5	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	5	124	0.59				
NE	Lon D Wright Power Plant	2240	8	1998	6	112	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	7	154	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	8	150	0.66				
NE	Lon D Wright Power Plant	2240	8	1998	9	108	0.62				
NE	Lon D Wright Power Plant	2240	8	1998	10		-				
NE	Lon D Wright Power Plant	2240	8	1998	11		-				
NE	Lon D Wright Power Plant	2240	8	1998	12	76	0.53	0.58	0.66	0.52	0.08
NE	Lon D Wright Power Plant	2240	8	1999	1	120	0.58				
NE	Lon D Wright Power Plant	2240	8	1999	2	104	0.59				
NE	Lon D Wright Power Plant	2240	8	1999	3	86	0.59				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Lon D Wright Power Plant	2240	8	1999	4	20	0.38				
NE	Lon D Wright Power Plant	2240	8	1999	5	77	0.41				
NE	Lon D Wright Power Plant	2240	8	1999	6	95	0.41				
NE	Lon D Wright Power Plant	2240	8	1999	7	114	0.40				
NE	Lon D Wright Power Plant	2240	8	1999	8	107	0.42				
NE	Lon D Wright Power Plant	2240	8	1999	9	82	0.44				
NE	Lon D Wright Power Plant	2240	8	1999	10	25	0.42				
NE	Lon D Wright Power Plant	2240	8	1999	11	75	0.43				
NE	Lon D Wright Power Plant	2240	8	1999	12	84	0.44	0.46	0.59	0.38	0.13
NE	Lon D Wright Power Plant	2240	8	2000	1	2	0.40				
NE	Lon D Wright Power Plant	2240	8	2000	2		-				
NE	Lon D Wright Power Plant	2240	8	2000	3	0	0.00				
NE	Lon D Wright Power Plant	2240	8	2000	4	47	0.43				
NE	Lon D Wright Power Plant	2240	8	2000	5	105	0.51				
NE	Lon D Wright Power Plant	2240	8	2000	6	90	0.50				
NE	Lon D Wright Power Plant	2240	8	2000	7	130	0.60				
NE	Lon D Wright Power Plant	2240	8	2000	8	97	0.39				
NE	Lon D Wright Power Plant	2240	8	2000	9	74	0.38				
NE	Lon D Wright Power Plant	2240	8	2000	10	76	0.38				
NE	Lon D Wright Power Plant	2240	8	2000	11	82	0.53				
NE	Lon D Wright Power Plant	2240	8	2000	12	138	0.58	0.48	0.60	0.00	0.48
NE	Lon D Wright Power Plant	2240	8	2001	1	103	0.52				
NE	Lon D Wright Power Plant	2240	8	2001	2	115	0.56				
NE	Lon D Wright Power Plant	2240	8	2001	3	128	0.51				
NE	Lon D Wright Power Plant	2240	8	2001	4	116	0.52				
NE	Lon D Wright Power Plant	2240	8	2001	5	4	0.29				
NE	Lon D Wright Power Plant	2240	8	2001	6	133	0.56				
NE	Lon D Wright Power Plant	2240	8	2001	7	128	0.51				
NE	Lon D Wright Power Plant	2240	8	2001	8	138	0.48				
NE	Lon D Wright Power Plant	2240	8	2001	9	87	0.44				
NE	Lon D Wright Power Plant	2240	8	2001	10		-				
NE	Lon D Wright Power Plant	2240	8	2001	11	59	0.36				
NE	Lon D Wright Power Plant	2240	8	2001	12	77	0.38	0.49	0.56	0.29	0.20
NE	Lon D Wright Power Plant	2240	8	2002	1	77	0.37				
NE	Lon D Wright Power Plant	2240	8	2002	2	30	0.40				
NE	Lon D Wright Power Plant	2240	8	2002	3	75	0.38				
NE	Lon D Wright Power Plant	2240	8	2002	4	96	0.40				
NE	Lon D Wright Power Plant	2240	8	2002	5	96	0.45				
NE	Lon D Wright Power Plant	2240	8	2002	6	122	0.48				
NE	Lon D Wright Power Plant	2240	8	2002	7	118	0.47				
NE	Lon D Wright Power Plant	2240	8	2002	8	111	0.46				
NE	Lon D Wright Power Plant	2240	8	2002	9	79	0.53				
NE	Lon D Wright Power Plant	2240	8	2002	10		-				
NE	Lon D Wright Power Plant	2240	8	2002	11	87	0.48				
NE	Lon D Wright Power Plant	2240	8	2002	12	85	0.38	0.44	0.53	0.37	0.09
NE	Lon D Wright Power Plant	2240	8	2003	1	134	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	2	67	0.45				
NE	Lon D Wright Power Plant	2240	8	2003	3	98	0.48				
NE	Lon D Wright Power Plant	2240	8	2003	4	94	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	5	22	0.39				
NE	Lon D Wright Power Plant	2240	8	2003	6	75	0.43				
NE	Lon D Wright Power Plant	2240	8	2003	7	123	0.42				
NE	Lon D Wright Power Plant	2240	8	2003	8	141	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	9	75	0.39				
NE	Lon D Wright Power Plant	2240	8	2003	10		-				
NE	Lon D Wright Power Plant	2240	8	2003	11	76	0.40				
NE	Lon D Wright Power Plant	2240	8	2003	12	111	0.42	0.45	0.51	0.39	0.07
NE	Lon D Wright Power Plant	2240	8	2004	1	116	0.45				
NE	Lon D Wright Power Plant	2240	8	2004	2	105	0.45				
NE	Lon D Wright Power Plant	2240	8	2004	3	26	0.42				
NE	Lon D Wright Power Plant	2240	8	2004	4	108	0.50				
NE	Lon D Wright Power Plant	2240	8	2004	5	122	0.49				
NE	Lon D Wright Power Plant	2240	8	2004	6	146	0.55				
NE	Lon D Wright Power Plant	2240	8	2004	7	141	0.51				
NE	Lon D Wright Power Plant	2240	8	2004	8	136	0.51				
NE	Lon D Wright Power Plant	2240	8	2004	9	103	0.42				
NE	Lon D Wright Power Plant	2240	8	2004	10	64	0.39				
NE	Lon D Wright Power Plant	2240	8	2004	11	17	0.32				
NE	Lon D Wright Power Plant	2240	8	2004	12	98	0.39	0.47	0.55	0.32	0.14
NE	Lon D Wright Power Plant	2240	8	2005	1	121	0.39				
NE	Lon D Wright Power Plant	2240	8	2005	2	111	0.41				
NE	Lon D Wright Power Plant	2240	8	2005	3	33	0.40				
NE	Lon D Wright Power Plant	2240	8	2005	4	124	0.49				
NE	Lon D Wright Power Plant	2240	8	2005	5	143	0.50				
NE	Lon D Wright Power Plant	2240	8	2005	6	137	0.47				
NE	Lon D Wright Power Plant	2240	8	2005	7	143	0.51				
NE	Lon D Wright Power Plant	2240	8	2005	8	124	0.45				
NE	Lon D Wright Power Plant	2240	8	2005	9	127	0.50				
NE	Lon D Wright Power Plant	2240	8	2005	10	63	0.55				
NE	Lon D Wright Power Plant	2240	8	2005	11	103	0.55				
NE	Lon D Wright Power Plant	2240	8	2005	12	103	0.48	0.47	0.55	0.39	0.08

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Nebraska City Station	6096	1	1997	1	1442	0.73				
NE	Nebraska City Station	6096	1	1997	2	1482	0.87				
NE	Nebraska City Station	6096	1	1997	3	1575	0.92				
NE	Nebraska City Station	6096	1	1997	4	1986	0.98				
NE	Nebraska City Station	6096	1	1997	5	1445	0.81				
NE	Nebraska City Station	6096	1	1997	6	1187	0.70				
NE	Nebraska City Station	6096	1	1997	7	1207	0.66				
NE	Nebraska City Station	6096	1	1997	8	977	0.55				
NE	Nebraska City Station	6096	1	1997	9	376	0.57				
NE	Nebraska City Station	6096	1	1997	10		-				
NE	Nebraska City Station	6096	1	1997	11	14	0.44				
NE	Nebraska City Station	6096	1	1997	12	541	0.57	0.76	0.98	0.44	0.32
NE	Nebraska City Station	6096	1	1998	1	1001	0.60				
NE	Nebraska City Station	6096	1	1998	2	973	0.68				
NE	Nebraska City Station	6096	1	1998	3	1626	0.67				
NE	Nebraska City Station	6096	1	1998	4	1580	0.69				
NE	Nebraska City Station	6096	1	1998	5	1463	0.64				
NE	Nebraska City Station	6096	1	1998	6	573	0.46				
NE	Nebraska City Station	6096	1	1998	7	937	0.44				
NE	Nebraska City Station	6096	1	1998	8	996	0.46				
NE	Nebraska City Station	6096	1	1998	9	929	0.49				
NE	Nebraska City Station	6096	1	1998	10	830	0.40				
NE	Nebraska City Station	6096	1	1998	11	865	0.39				
NE	Nebraska City Station	6096	1	1998	12	1059	0.45	0.53	0.69	0.39	0.16
NE	Nebraska City Station	6096	1	1999	1	918	0.52				
NE	Nebraska City Station	6096	1	1999	2		-				
NE	Nebraska City Station	6096	1	1999	3	1490	0.70				
NE	Nebraska City Station	6096	1	1999	4	1861	0.75				
NE	Nebraska City Station	6096	1	1999	5	1914	0.75				
NE	Nebraska City Station	6096	1	1999	6	1117	0.72				
NE	Nebraska City Station	6096	1	1999	7	1832	0.72				
NE	Nebraska City Station	6096	1	1999	8	1618	0.71				
NE	Nebraska City Station	6096	1	1999	9	1509	0.69				
NE	Nebraska City Station	6096	1	1999	10	2004	0.76				
NE	Nebraska City Station	6096	1	1999	11	1817	0.75				
NE	Nebraska City Station	6096	1	1999	12	1617	0.74	0.71	0.76	0.52	0.19
NE	Nebraska City Station	6096	1	2000	1	1477	0.72				
NE	Nebraska City Station	6096	1	2000	2	1197	0.70				
NE	Nebraska City Station	6096	1	2000	3	299	0.65				
NE	Nebraska City Station	6096	1	2000	4	1371	0.67				
NE	Nebraska City Station	6096	1	2000	5	1351	0.67				
NE	Nebraska City Station	6096	1	2000	6	1232	0.69				
NE	Nebraska City Station	6096	1	2000	7	1270	0.64				
NE	Nebraska City Station	6096	1	2000	8	1357	0.63				
NE	Nebraska City Station	6096	1	2000	9	1332	0.68				
NE	Nebraska City Station	6096	1	2000	10	1527	0.69				
NE	Nebraska City Station	6096	1	2000	11	1406	0.67				
NE	Nebraska City Station	6096	1	2000	12	1409	0.65	0.67	0.72	0.63	0.05
NE	Nebraska City Station	6096	1	2001	1	1467	0.68				
NE	Nebraska City Station	6096	1	2001	2	879	0.67				
NE	Nebraska City Station	6096	1	2001	3	1501	0.67				
NE	Nebraska City Station	6096	1	2001	4	1406	0.66				
NE	Nebraska City Station	6096	1	2001	5	1058	0.70				
NE	Nebraska City Station	6096	1	2001	6	1345	0.69				
NE	Nebraska City Station	6096	1	2001	7	1315	0.68				
NE	Nebraska City Station	6096	1	2001	8	1370	0.64				
NE	Nebraska City Station	6096	1	2001	9	1412	0.67				
NE	Nebraska City Station	6096	1	2001	10	1614	0.73				
NE	Nebraska City Station	6096	1	2001	11	1443	0.70				
NE	Nebraska City Station	6096	1	2001	12	1396	0.64	0.68	0.73	0.64	0.05
NE	Nebraska City Station	6096	1	2002	1	1258	0.63				
NE	Nebraska City Station	6096	1	2002	2	1108	0.58				
NE	Nebraska City Station	6096	1	2002	3	30	0.55				
NE	Nebraska City Station	6096	1	2002	4	329	0.68				
NE	Nebraska City Station	6096	1	2002	5	1420	0.64				
NE	Nebraska City Station	6096	1	2002	6	1030	0.61				
NE	Nebraska City Station	6096	1	2002	7	1429	0.64				
NE	Nebraska City Station	6096	1	2002	8	1017	0.63				
NE	Nebraska City Station	6096	1	2002	9	1327	0.66				
NE	Nebraska City Station	6096	1	2002	10	1303	0.62				
NE	Nebraska City Station	6096	1	2002	11	1193	0.59				
NE	Nebraska City Station	6096	1	2002	12	1375	0.66	0.63	0.68	0.55	0.07
NE	Nebraska City Station	6096	1	2003	1	1263	0.62				
NE	Nebraska City Station	6096	1	2003	2	1183	0.60				
NE	Nebraska City Station	6096	1	2003	3	1217	0.62				
NE	Nebraska City Station	6096	1	2003	4	813	0.58				
NE	Nebraska City Station	6096	1	2003	5	1042	0.55				
NE	Nebraska City Station	6096	1	2003	6	1300	0.61				
NE	Nebraska City Station	6096	1	2003	7	1547	0.66				
NE	Nebraska City Station	6096	1	2003	8	1466	0.64				
NE	Nebraska City Station	6096	1	2003	9	1380	0.63				

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Nebraska City Station	6096	1	2003	10	1448	0.72				
NE	Nebraska City Station	6096	1	2003	11	1113	0.60				
NE	Nebraska City Station	6096	1	2003	12	1280	0.60	0.62	0.72	0.55	0.10
NE	Nebraska City Station	6096	1	2004	1	1425	0.66				
NE	Nebraska City Station	6096	1	2004	2	1374	0.72				
NE	Nebraska City Station	6096	1	2004	3	1480	0.69				
NE	Nebraska City Station	6096	1	2004	4	1348	0.67				
NE	Nebraska City Station	6096	1	2004	5		-				
NE	Nebraska City Station	6096	1	2004	6	735	0.66				
NE	Nebraska City Station	6096	1	2004	7	1350	0.65				
NE	Nebraska City Station	6096	1	2004	8	1500	0.73				
NE	Nebraska City Station	6096	1	2004	9	1563	0.74				
NE	Nebraska City Station	6096	1	2004	10	1577	0.72				
NE	Nebraska City Station	6096	1	2004	11	1480	0.69				
NE	Nebraska City Station	6096	1	2004	12	1760	0.76	0.70	0.76	0.65	0.06
NE	Nebraska City Station	6096	1	2005	1	1664	0.73				
NE	Nebraska City Station	6096	1	2005	2	236	0.65				
NE	Nebraska City Station	6096	1	2005	3	1663	0.72				
NE	Nebraska City Station	6096	1	2005	4	1474	0.71				
NE	Nebraska City Station	6096	1	2005	5	1437	0.74				
NE	Nebraska City Station	6096	1	2005	6	1645	0.73				
NE	Nebraska City Station	6096	1	2005	7	1676	0.73				
NE	Nebraska City Station	6096	1	2005	8	1619	0.73				
NE	Nebraska City Station	6096	1	2005	9	1491	0.74				
NE	Nebraska City Station	6096	1	2005	10	1464	0.68				
NE	Nebraska City Station	6096	1	2005	11	1537	0.76				
NE	Nebraska City Station	6096	1	2005	12	1643	0.73	0.73	0.76	0.65	0.07
NE	Platte	59	1	1997	1	220	0.65				
NE	Platte	59	1	1997	2	189	0.65				
NE	Platte	59	1	1997	3	190	0.65				
NE	Platte	59	1	1997	4	163	0.66				
NE	Platte	59	1	1997	5	203	0.63				
NE	Platte	59	1	1997	6	222	0.69				
NE	Platte	59	1	1997	7	223	0.63				
NE	Platte	59	1	1997	8	218	0.64				
NE	Platte	59	1	1997	9	79	0.67				
NE	Platte	59	1	1997	10		-				
NE	Platte	59	1	1997	11	119	0.62				
NE	Platte	59	1	1997	12	180	0.60	0.64	0.69	0.60	0.05
NE	Platte	59	1	1998	1	278	0.90				
NE	Platte	59	1	1998	2	217	0.95				
NE	Platte	59	1	1998	3	236	0.88				
NE	Platte	59	1	1998	4	200	0.82				
NE	Platte	59	1	1998	5	163	0.75				
NE	Platte	59	1	1998	6	190	0.67				
NE	Platte	59	1	1998	7	241	0.72				
NE	Platte	59	1	1998	8	273	0.82				
NE	Platte	59	1	1998	9	250	0.85				
NE	Platte	59	1	1998	10	185	0.97				
NE	Platte	59	1	1998	11	259	0.89				
NE	Platte	59	1	1998	12	292	0.92	0.84	0.97	0.67	0.17
NE	Platte	59	1	1999	1	244	0.75				
NE	Platte	59	1	1999	2	188	0.69				
NE	Platte	59	1	1999	3	228	0.70				
NE	Platte	59	1	1999	4	179	0.75				
NE	Platte	59	1	1999	5	233	0.73				
NE	Platte	59	1	1999	6	216	0.71				
NE	Platte	59	1	1999	7	323	0.72				
NE	Platte	59	1	1999	8	241	0.70				
NE	Platte	59	1	1999	9	201	0.68				
NE	Platte	59	1	1999	10	130	0.70				
NE	Platte	59	1	1999	11	191	0.79				
NE	Platte	59	1	1999	12	188	0.71	0.72	0.79	0.68	0.07
NE	Platte	59	1	2000	1	236	0.74				
NE	Platte	59	1	2000	2	208	0.70				
NE	Platte	59	1	2000	3	195	0.66				
NE	Platte	59	1	2000	4	199	0.69				
NE	Platte	59	1	2000	5	252	0.69				
NE	Platte	59	1	2000	6	215	0.65				
NE	Platte	59	1	2000	7	212	0.56				
NE	Platte	59	1	2000	8	213	0.57				
NE	Platte	59	1	2000	9	89	0.61				
NE	Platte	59	1	2000	10	180	0.79				
NE	Platte	59	1	2000	11	255	0.66				
NE	Platte	59	1	2000	12	243	0.61	0.66	0.79	0.56	0.14
NE	Platte	59	1	2001	1	237	0.63				
NE	Platte	59	1	2001	2	214	0.61				
NE	Platte	59	1	2001	3	203	0.60				
NE	Platte	59	1	2001	4	236	0.62				
NE	Platte	59	1	2001	5	200	0.59				
NE	Platte	59	1	2001	6	216	0.64				

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Platte	59	1	2001	7	225	0.61				
NE	Platte	59	1	2001	8	216	0.59				
NE	Platte	59	1	2001	9	167	0.56				
NE	Platte	59	1	2001	10	136	0.55				
NE	Platte	59	1	2001	11	187	0.60				
NE	Platte	59	1	2001	12	198	0.58	0.60	0.64	0.55	0.05
NE	Platte	59	1	2002	1	221	0.64				
NE	Platte	59	1	2002	2	182	0.59				
NE	Platte	59	1	2002	3	271	0.69				
NE	Platte	59	1	2002	4	174	0.65				
NE	Platte	59	1	2002	5	242	0.69				
NE	Platte	59	1	2002	6	193	0.54				
NE	Platte	59	1	2002	7	231	0.60				
NE	Platte	59	1	2002	8	215	0.59				
NE	Platte	59	1	2002	9	155	0.58				
NE	Platte	59	1	2002	10	0	0.07				
NE	Platte	59	1	2002	11	145	0.64				
NE	Platte	59	1	2002	12	220	0.60	0.62	0.69	0.07	0.55
NE	Platte	59	1	2003	1	193	0.51				
NE	Platte	59	1	2003	2	191	0.54				
NE	Platte	59	1	2003	3	217	0.56				
NE	Platte	59	1	2003	4	167	0.55				
NE	Platte	59	1	2003	5	200	0.54				
NE	Platte	59	1	2003	6	179	0.53				
NE	Platte	59	1	2003	7	197	0.52				
NE	Platte	59	1	2003	8	193	0.52				
NE	Platte	59	1	2003	9	173	0.55				
NE	Platte	59	1	2003	10	105	0.54				
NE	Platte	59	1	2003	11	179	0.51				
NE	Platte	59	1	2003	12	199	0.54	0.53	0.56	0.51	0.03
NE	Platte	59	1	2004	1	207	0.54				
NE	Platte	59	1	2004	2	197	0.52				
NE	Platte	59	1	2004	3	210	0.55				
NE	Platte	59	1	2004	4	162	0.54				
NE	Platte	59	1	2004	5	196	0.53				
NE	Platte	59	1	2004	6	169	0.49				
NE	Platte	59	1	2004	7	168	0.46				
NE	Platte	59	1	2004	8	176	0.50				
NE	Platte	59	1	2004	9	177	0.54				
NE	Platte	59	1	2004	10	90	0.49				
NE	Platte	59	1	2004	11	173	0.51				
NE	Platte	59	1	2004	12	235	0.64	0.53	0.64	0.46	0.11
NE	Platte	59	1	2005	1	210	0.54				
NE	Platte	59	1	2005	2	189	0.55				
NE	Platte	59	1	2005	3	181	0.59				
NE	Platte	59	1	2005	4	225	0.62				
NE	Platte	59	1	2005	5	228	0.59				
NE	Platte	59	1	2005	6	214	0.58				
NE	Platte	59	1	2005	7	230	0.59				
NE	Platte	59	1	2005	8	229	0.60				
NE	Platte	59	1	2005	9	215	0.62				
NE	Platte	59	1	2005	10	152	0.59				
NE	Platte	59	1	2005	11	192	0.58				
NE	Platte	59	1	2005	12	212	0.62	0.59	0.62	0.54	0.04
						505034		0.59			

Percentile of Monthly SO2 Rates	
50	0.57
95	0.81
97	0.82
99	0.90
99.5	0.96
100	1.95

Attachment D
Sunflower Holcomb
Summary of Subpart Da Emission Reports
from July '98 through June '06

Occurrence of Inlet Coal SO2 Concentrations (30-day average) above…

Inlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
1.50	-	-	-
1.45	-	-	-
1.40	-	-	-
1.35	-	-	-
1.30	-	-	-
1.25	-	-	-
1.20	-	-	-
1.15	-	-	-
1.10	-	-	-
1.05	-	-	-
1.00	-	-	-
0.99	-	-	-
0.98	-	-	-
0.97	-	-	-
0.96	-	-	-
0.95	0.1%	99.9%	0.1%
0.94	0.2%	99.8%	0.1%
0.93	0.3%	99.7%	0.4%
0.92	0.7%	99.3%	0.6%
0.91	1.3%	98.7%	0.7%
0.90	2.0%	98.0%	0.9%
0.89	2.9%	97.1%	1.3%
0.88	4.2%	95.8%	1.1%
0.87	5.3%	94.7%	0.7%
0.86	6.0%	94.0%	1.5%
0.85	7.5%	92.5%	1.5%
0.84	9.0%	91.0%	1.6%
0.83	10.6%	89.4%	2.2%
0.82	12.8%	87.2%	2.4%
0.81	15.2%	84.8%	3.3%
0.80	18.5%	81.5%	3.4%
0.79	21.9%	78.1%	3.0%
0.78	24.9%	75.1%	3.5%
0.77	28.4%	71.6%	2.5%
0.76	30.9%	69.1%	1.6%
0.75	32.5%	67.5%	1.3%
0.74	33.8%	66.2%	1.8%
0.73	35.6%	64.4%	1.0%
0.72	36.6%	63.4%	1.5%
0.71	38.1%	61.9%	0.5%
0.70	38.6%	61.4%	0.7%
0.69	39.3%	60.7%	2.3%
0.68	41.6%	58.4%	3.9%
0.67	45.5%	54.5%	6.4%
0.66	51.9%	48.1%	8.6%
0.65	60.5%	39.5%	8.5%
0.64	69.0%	31.0%	7.4%
0.63	76.4%	23.6%	8.4%
0.62	84.8%	15.2%	6.4%
0.61	91.2%	8.8%	3.4%
0.60	94.6%	5.4%	2.4%
0.59	97.0%	3.0%	1.6%
0.58	98.6%	1.4%	0.8%
0.57	99.4%	0.6%	0.5%
0.56	99.9%	0.1%	0.1%
0.55	100.0%	0.0%	0.0%
0.54	100.0%	0.0%	0.0%
0.53	100.0%	0.0%	0.0%
0.52	100.0%	0.0%	0.0%
0.51	100.0%	0.0%	0.0%
0.50	100.0%	0.0%	-
0.49	-	-	-
0.48	-	-	-
0.47	-	-	-
0.46	-	-	-
0.45	-	-	-
0.44	-	-	-
0.43	-	-	-
0.42	-	-	-
0.41	-	-	-
0.40	-	-	-
0.39	-	-	-
0.38	-	-	-
0.37	-	-	-
0.36	-	-	-
0.35	-	-	-

Occurrence of Outlet SO2 Concentrations (30-day average) above…

Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.50	-	-	-
0.49	-	-	-
0.48	-	-	-
0.47	-	-	-
0.46	-	-	-
0.45	-	-	-
0.44	-	-	-
0.43	-	-	-
0.42	-	-	-
0.41	-	-	-
0.40	-	-	-
0.39	-	-	-
0.38	-	-	-
0.37	-	-	-
0.36	-	-	-
0.35	-	-	-
0.34	-	-	-
0.33	-	-	-
0.32	-	-	-
0.31	-	-	-
0.30	-	-	-
0.29	-	-	-
0.28	-	-	-
0.27	-	-	-
0.26	-	-	-
0.25	-	-	-
0.24	-	-	-
0.23	-	-	-
0.22	-	-	-
0.21	0.2%	99.8%	0.3%
0.20	0.5%	99.5%	1.4%
0.19	1.9%	98.1%	4.0%
0.18	5.9%	94.1%	11.1%
0.17	17.0%	83.0%	21.5%
0.16	38.5%	61.5%	18.7%
0.15	57.2%	42.8%	11.2%
0.14	68.4%	31.6%	8.1%

Occurrence of SO2 Percent Removal (30-day average) above…

% Removal	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
100.0%	-	-	-
99.0%	-	-	-
98.0%	-	-	-
97.0%	-	-	-
96.0%	-	-	-
95.0%	-	-	-
94.0%	-	-	-
93.0%	-	-	-
92.0%	-	-	-
91.0%	-	-	-
90.0%	-	-	-
89.0%	-	-	-
88.0%	-	-	-
87.0%	0.0%	100.0%	2.4%
86.0%	2.4%	97.6%	4.3%
85.0%	6.7%	93.3%	4.3%
84.0%	11.0%	89.0%	4.7%
83.0%	15.7%	84.3%	4.2%
82.0%	19.9%	80.1%	6.3%
81.0%	26.2%	73.8%	8.5%
80.0%	34.7%	65.3%	8.3%
79.0%	43.0%	57.0%	10.4%
78.0%	53.4%	46.6%	7.0%
77.0%	60.4%	39.6%	6.8%
76.0%	67.2%	32.8%	14.8%
75.0%	82.0%	18.0%	14.1%
74.0%	96.1%	3.9%	3.6%
73.0%	99.7%	0.3%	0.3%
72.0%	100.0%	0.0%	0.0%
71.0%	100.0%	0.0%	-
70.0%	-	-	-
69.0%	-	-	-
68.0%	-	-	-
67.0%	-	-	-
66.0%	-	-	-
65.0%	-	-	-
64.0%	-	-	-
63.0%	-	-	-
62.0%	-	-	-
61.0%	-	-	-
60.0%	-	-	-

Occurrence of NOx Concentrations (30-day average) above…

Outlet NOx	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.50	-	-	-
0.49	-	-	-
0.48	-	-	-
0.47	-	-	-
0.46	-	-	-
0.45	-	-	-
0.44	-	-	-
0.43	-	-	-
0.42	-	-	-
0.41	-	-	-
0.40	-	-	-
0.39	-	-	-
0.38	-	-	-
0.37	-	-	-
0.36	-	-	-
0.35	-	-	-
0.34	0.2%	99.8%	4.4%
0.33	4.6%	95.4%	13.8%
0.32	18.4%	81.6%	7.5%
0.31	25.9%	74.1%	10.1%
0.30	36.0%	64.0%	6.5%
0.29	42.5%	57.5%	14.6%
0.28	57.1%	42.9%	22.6%
0.27	79.7%	20.3%	16.0%
0.26	95.7%	4.3%	4.2%
0.25	99.9%	0.1%	0.0%
0.24	99.9%	0.1%	0.1%
0.23	100.0%	0.0%	0.0%
0.22	100.0%	0.0%	0.0%
0.21	100.0%	0.0%	0.0%
0.20	100.0%	0.0%	-
0.19	-	-	-
0.18	-	-	-
0.17	-	-	-
0.16	-	-	-
0.15	-	-	-
0.14	-	-	-

Occurrence of CO Concentrations (30-day average) above…

Outlet CO	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.20	-	-	-
0.19	-	-	-
0.18	-	-	-
0.17	-	-	-
0.16	-	-	-
0.15	-	-	-
0.14	-	-	-

Occurrence of Outlet SO2 at "Hypothetical" 90% Removal (30-day average) above…

Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.200	-	-	-
0.190	-	-	-
0.180	-	-	-
0.170	-	-	-
0.160	-	-	-
0.150	-	-	-
0.140	-	-	-

Occurrence of Outlet SO2 at "Hypothetical" 92% Removal (30-day average) above…

Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.200	-	-	-
0.190	-	-	-
0.180	-	-	-
0.170	-	-	-
0.160	-	-	-
0.150	-	-	-
0.140	-	-	-

Occurrence of Outlet SO2 at "Hypothetical" 94% Removal (30-day average) above…

Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.200	-	-	-
0.190	-	-	-
0.180	-	-	-
0.170	-	-	-
0.160	-	-	-
0.150	-	-	-
0.140	-	-	-

Sunflower Electric Cooperative
Holcomb Unit H1

Occurrence of Inlet Coal SO2 Concentrations (30-day average) above…				Occurrence of Outlet SO2 Concentrations (30-day average) above…				Occurrence of SO2 Percent Removal (30-day average) above…				Occurrence of NOx Concentrations (30-day average) above…			
Inlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	% Removal	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	Outlet NOx	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
				0.13	76.5%	23.5%	8.9%					0.13	-	-	-
				0.12	85.4%	14.6%	8.1%					0.12	-	-	-
				0.11	93.5%	6.5%	4.4%					0.11	-	-	-
				0.10	97.9%	2.1%	0.6%					0.10	-	-	-
				0.09	98.5%	1.5%	-					0.09	-	-	-
				0.08	-	-	-					0.08	-	-	-
				0.07	-	-	-					0.07	-	-	-
				0.06	-	-	-					0.06	-	-	-
				0.05	-	-	-					0.05	-	-	-
				0.04	-	-	-					0.04	-	-	-
				0.03	-	-	-					0.03	-	-	-
				0.02	-	-	-					0.02	-	-	-
				0.01	-	-	-					0.01	-	-	-
				0.00	-	-	-					0.00	-	-	-

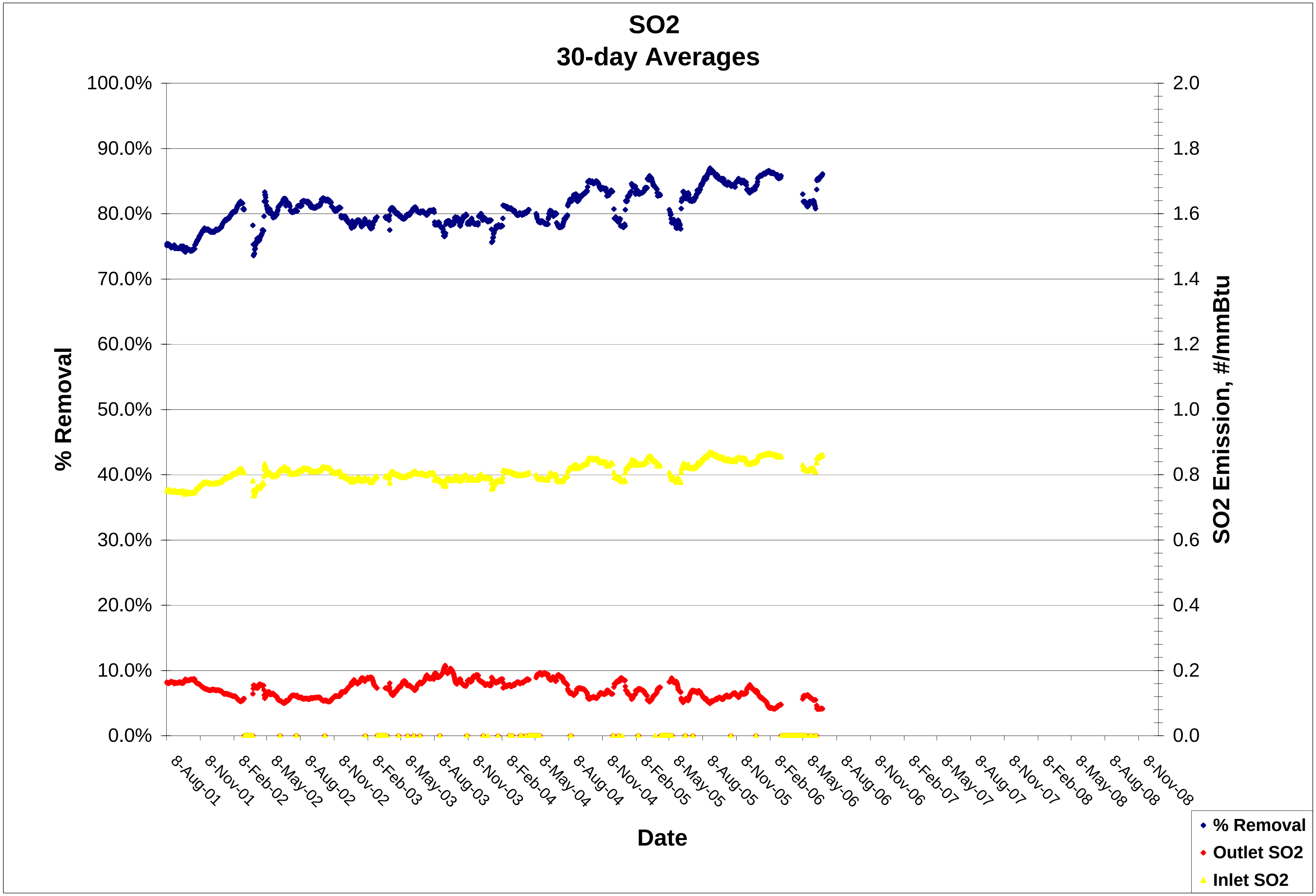
Occurrence of CO Concentrations (30-day average) above…				Occurrence of Outlet SO2 at "Hypothetical" 90% Removal (30-day average) above…				Occurrence of Outlet SO2 at "Hypothetical" 92% Removal (30-day average) above…				Occurrence of Outlet SO2 at "Hypothetical" 94% Removal (30-day average) above…			
Outlet CO	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence	Outlet SO2	Cumulative Occurrence (ascending)	Cumulative Occurrence (descending)	Individual Occurrence
0.13	-	-	-	0.130	-	-	-	0.130	-	-	-	0.130	-	-	-
0.12	-	-	-	0.120	-	-	-	0.120	-	-	-	0.120	-	-	-
0.11	-	-	-	0.110	-	-	-	0.110	-	-	-	0.110	-	-	-
0.10	-	-	-	0.100	-	-	-	0.100	-	-	-	0.100	-	-	-
0.09	-	-	-	0.090	2.0%	98.0%	16.3%	0.090	-	-	-	0.090	-	-	-
0.08	-	-	-	0.080	18.3%	81.7%	20.2%	0.075	0.2%	99.8%	4.4%	0.080	-	-	-
0.07	-	-	-	0.070	38.5%	61.5%	55.8%	0.070	4.6%	95.4%	27.8%	0.070	-	-	-
0.06	-	-	-	0.060	94.3%	5.7%	5.6%	0.060	32.4%	67.6%	46.8%	0.060	-	-	-
0.05	-	-	-	0.050	99.9%	0.1%	0.0%	0.050	79.2%	20.8%	20.7%	0.050	9.9%	90.1%	36.9%
0.04	2.9%	97.1%	41.4%	0.040	99.9%	0.1%	0.0%	0.040	99.9%	0.1%	0.0%	0.040	46.8%	53.2%	53.1%
0.03	44.3%	55.7%	50.7%	0.030	99.9%	0.1%	0.0%	0.030	99.9%	0.1%	0.0%	0.030	99.9%	0.1%	0.0%
0.02	95.0%	5.0%	-	0.020	99.9%	0.1%	0.0%	0.020	99.9%	0.1%	0.0%	0.020	99.9%	0.1%	0.0%
0.01	-	-	-	0.010	99.9%	0.1%	0.1%	0.010	99.9%	0.1%	0.1%	0.010	99.9%	0.1%	0.1%
0.00	-	-	-	0.000	100.0%	0.0%	-	0.000	100.0%	0.0%	-	0.000	100.0%	0.0%	-

Sunflower Electric Cooperative
Holcomb Unit H1
SO2 Emissions Scrubber Performance

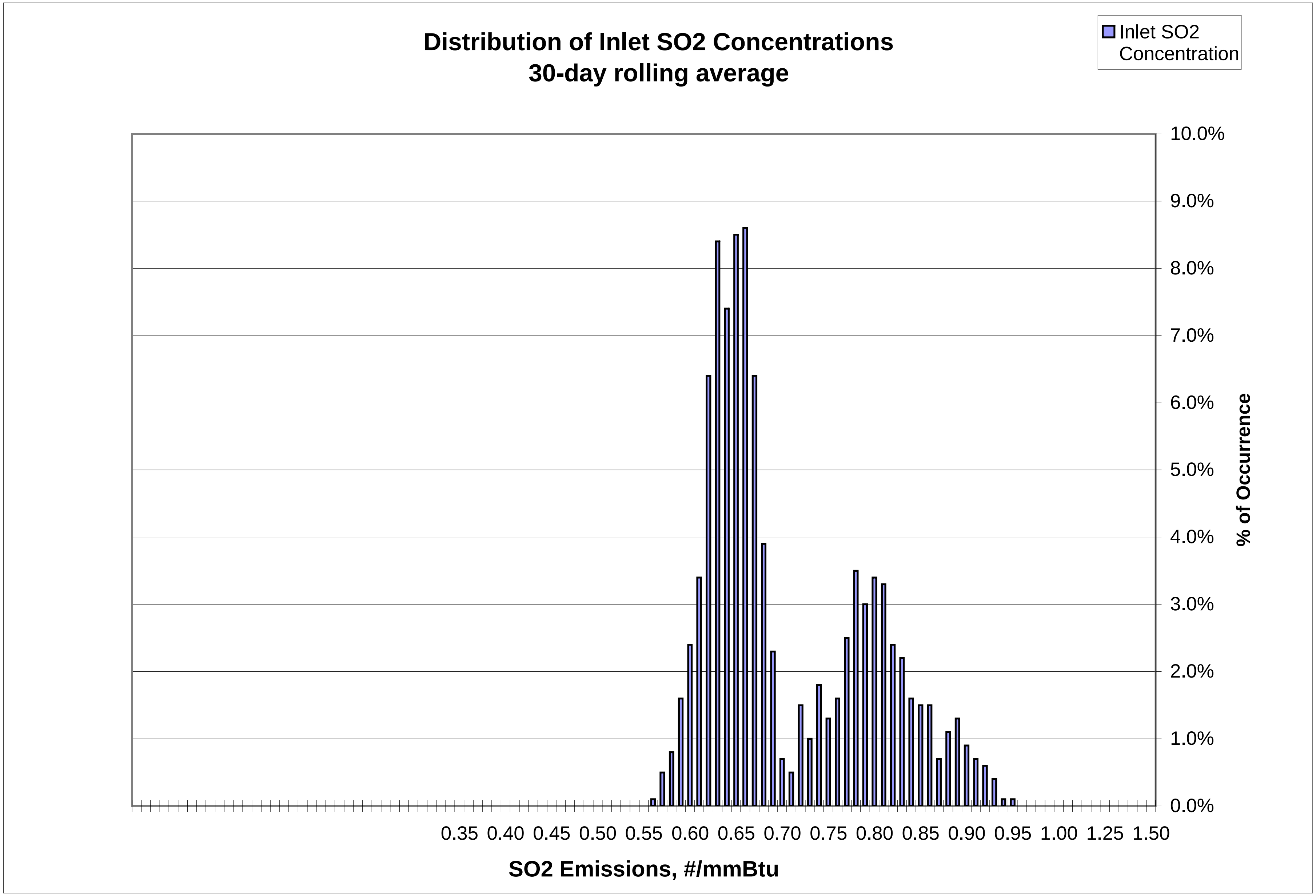
Year	Quarter	SO2 Emissions, #/mmBtu																									
		0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30
1998	1																										
1998	2																										
1998	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	42%	61%	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1998	4	0%	0%	0%	0%	0%	0%	0%	0%	10%	55%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1999	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	38%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1999	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	24%	70%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1999	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	16%	42%	60%	82%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1999	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2000	1	0%	0%	0%	0%	0%	0%	0%	0%	1%	13%	33%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2000	2	0%	0%	0%	0%	0%	0%	0%	0%	9%	41%	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2000	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	20%	33%	84%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2000	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2001	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	77%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2001	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2001	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2001	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	58%	72%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	1	0%	0%	0%	0%	0%	0%	30%	57%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	2	0%	0%	0%	0%	0%	0%	30%	57%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	3	0%	0%	0%	0%	0%	0%	36%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	4	0%	0%	0%	0%	0%	0%	34%	60%	70%	81%	90%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	37%	68%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	2	0%	0%	0%	0%	0%	0%	0%	2%	13%	38%	71%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	14%	51%	77%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	40%	81%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	73%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	40%	58%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	3	0%	0%	0%	0%	0%	0%	1%	4%	26%	52%	61%	72%	81%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	4	0%	0%	0%	0%	0%	0%	5%	33%	68%	76%	77%	83%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	1	0%	0%	0%	0%	0%	1%	18%	39%	57%	90%	91%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	2	0%	0%	0%	0%	0%	5%	29%	30%	40%	54%	67%	81%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	3	0%	0%	0%	0%	0%	8%	44%	64%	78%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	4	0%	0%	0%	0%	0%	0%	4%	37%	72%	84%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	1	0%	0%	0%	13%	50%	60%	75%	90%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	2	0%	0%	0%	34%	36%	36%	60%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	3																										
2006	4																										

Year	Quarter	SO2 % Removal																													
		67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
1998	1																														
1998	2																														
1998	3	100%	100%	100%	100%	100%	100%	100%	92%	66%	42%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1998	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	81%	67%	50%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1999	1	100%	100%	100%	100%	100%	100%	100%	90%	86%	66%	35%	10%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1999	2	100%	100%	100%	100%	100%	100%	100%	92%	44%	18%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1999	3	100%	100%	100%	100%	100%	100%	100%	90%	49%	36%	10%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1999	4	100%	100%	100%	100%	100%	100%	100%	100%	99%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2000	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	44%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2000	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	74%	52%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2000	3	100%	100%	100%	100%	100%	100%	100%	100%	60%	24%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2000	4	100%	100%	100%	100%	100%	100%	100%	100%	79%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	1	100%	100%	100%	100%	100%	99%	99%	95%	64%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	2	100%	100%	100%	100%	100%	100%	100%	100%	69%	31%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	3	100%	100%	100%	100%	100%	100%	100%	100%	93%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	4	100%	100%	100%	100%	100%	100%	100%	100%	92%	72%	62%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	88%	61%	36%	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	88%	61%	36%	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	86%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2002	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	73%	58%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2003	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	66%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2003	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	80%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2003	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	68%	42%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2003	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	85%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	90%	64%	52%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	91%	58%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	82%	71%	61%	58%	38%	6%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	78%	77%	76%	76%	61%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	91%	91%	91%	90%	84%	53%	21%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	83%	59%	54%	51%	43%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	82%	71%	63%	38%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	57%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2006	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	91%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2006	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	81%	38%	36%	34%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2006	3																														
2006	4																														

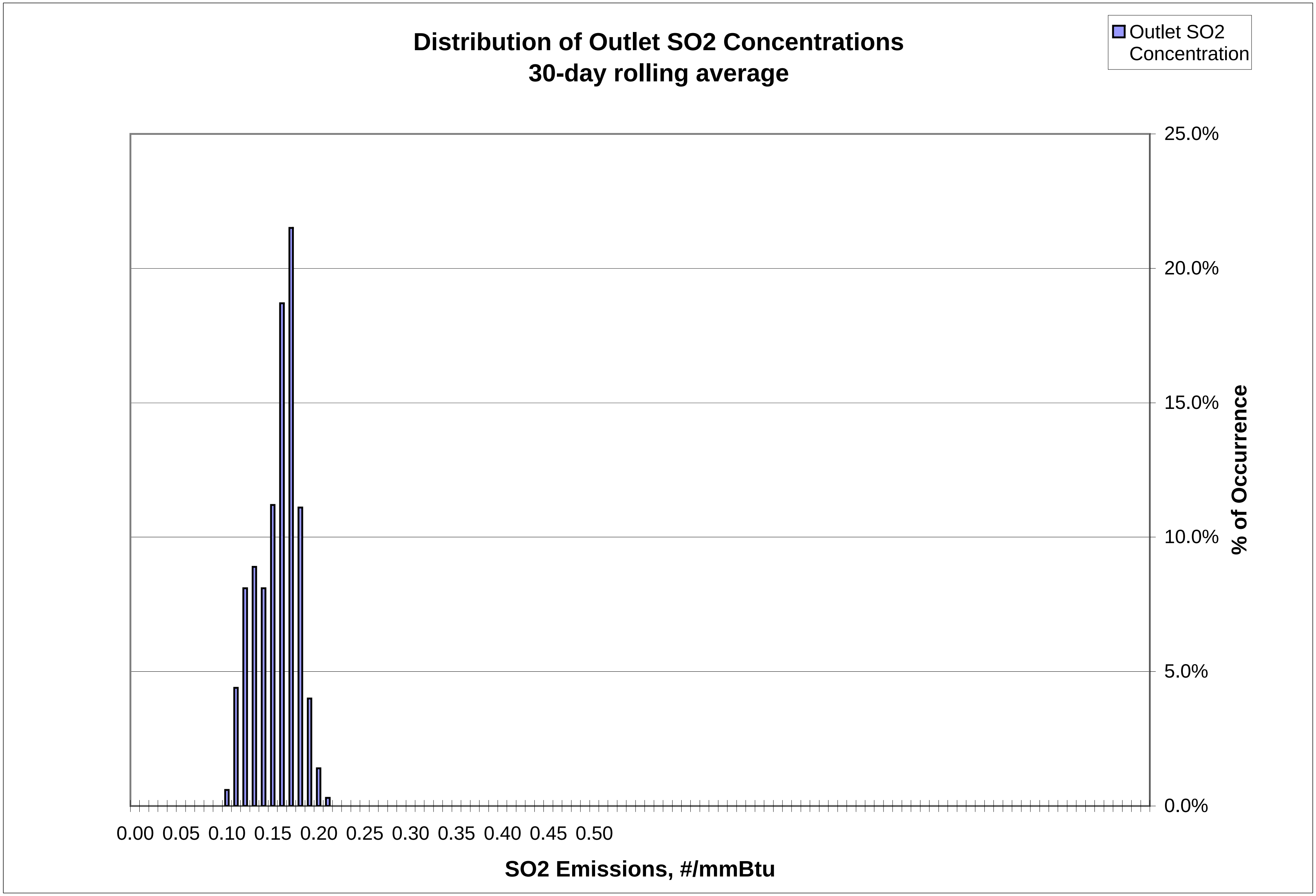
Sunflower Electric Cooperative
Holcomb Unit H1



Sunflower Electric Cooperative
Holcomb Unit H1



Sunflower Electric Cooperative
Holcomb Unit H1



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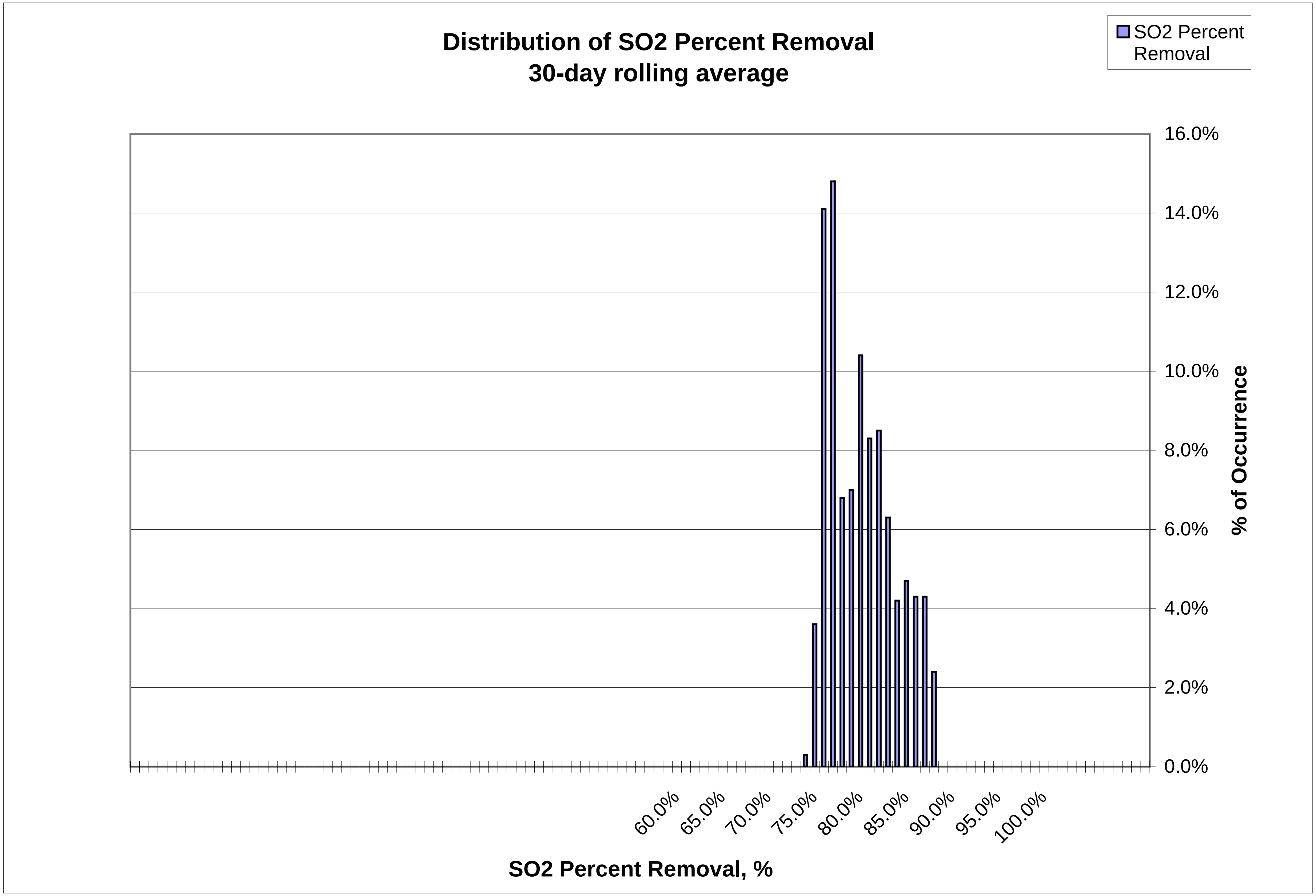
Holcomb Unit H1



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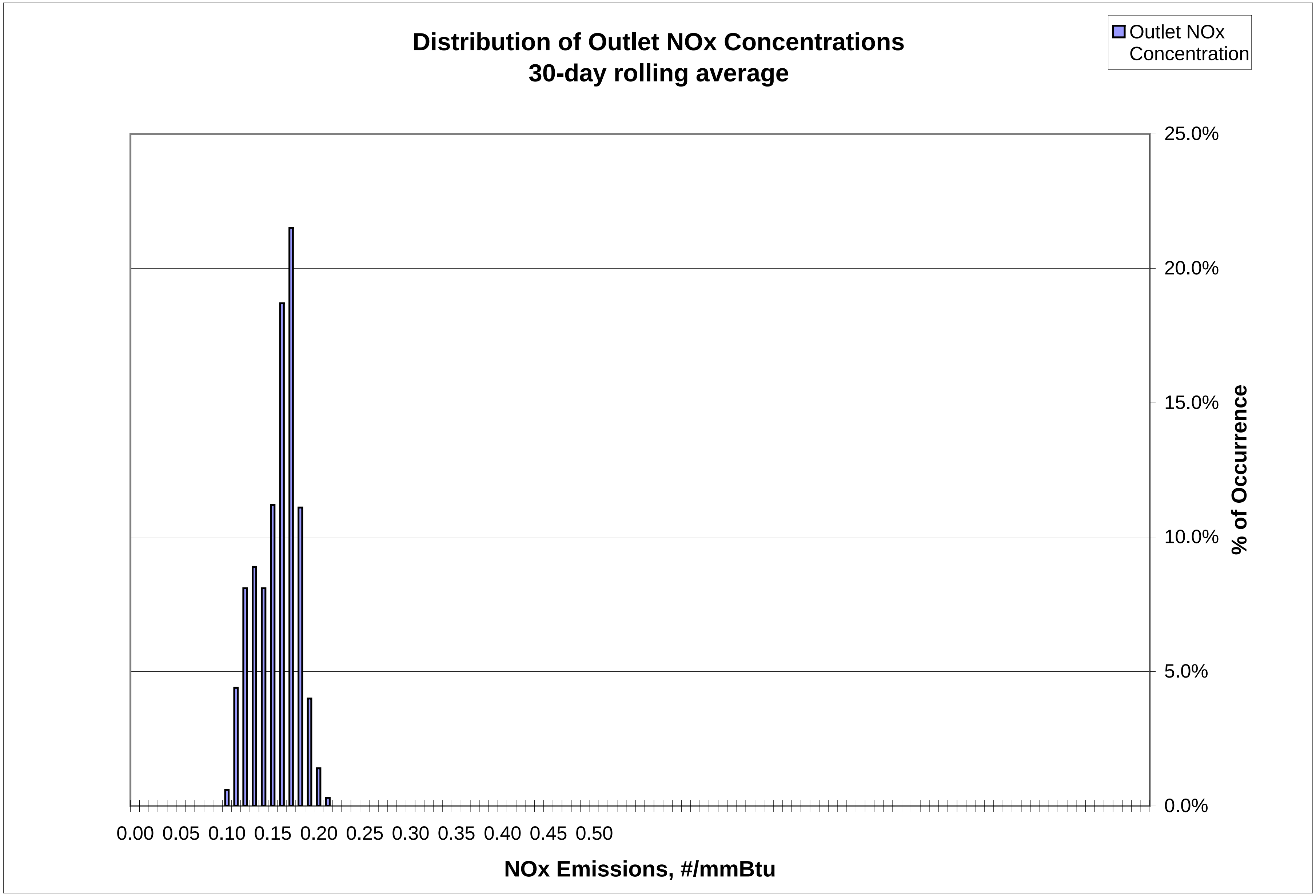
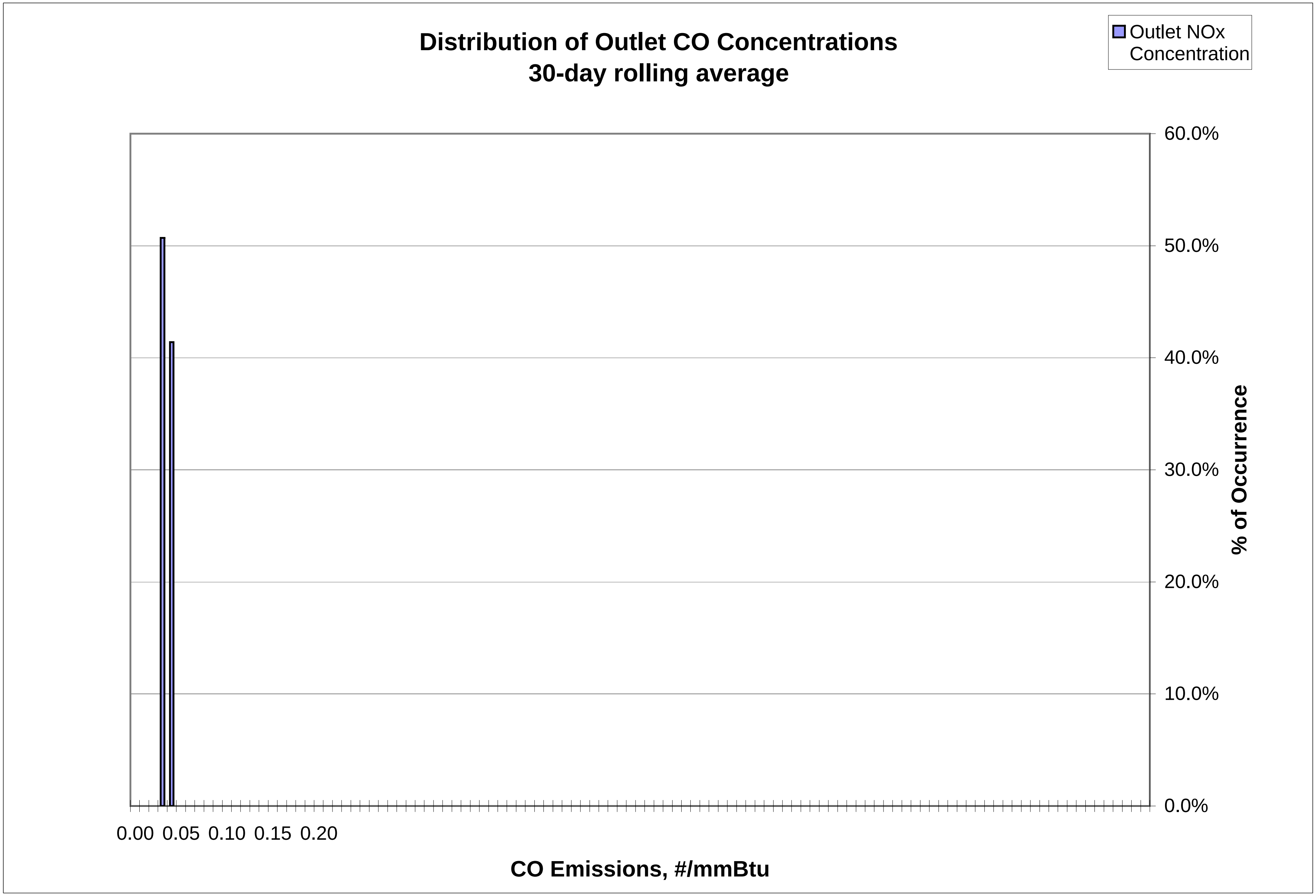
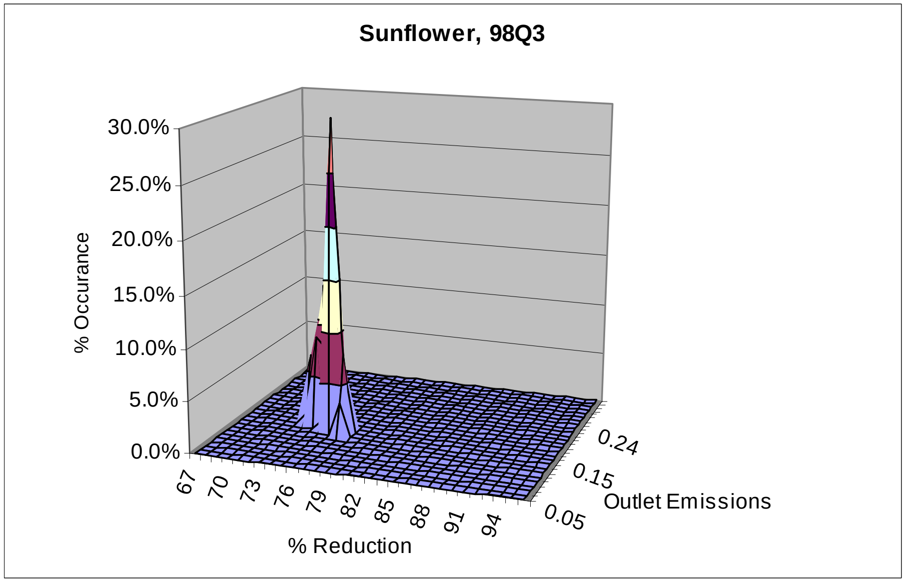
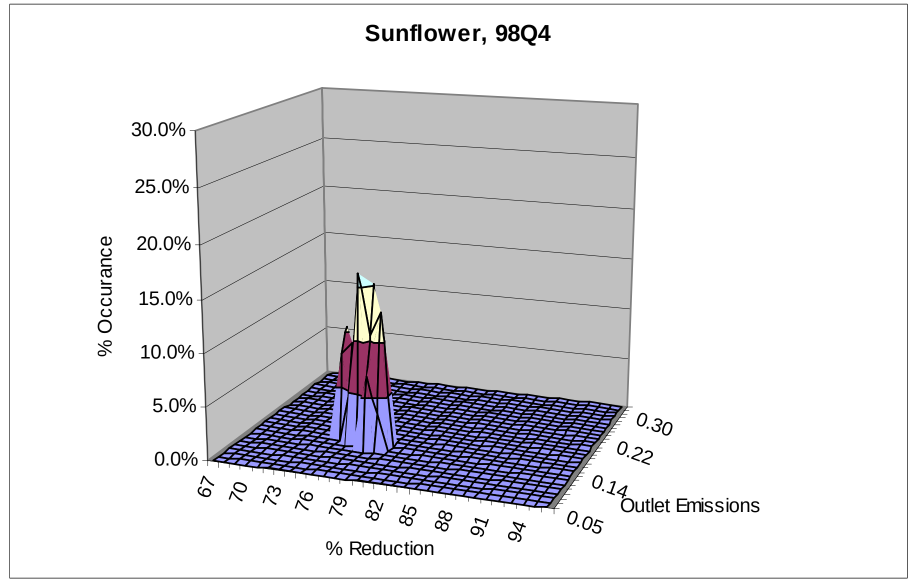
Holcomb Unit H1



Sunflower Electric Cooperative
Holcomb Unit H1




Sunflower, 98Q3
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
% Occurance
67 70 73 76 79 82 85 88 91 94
% Reduction
0.05 0.15 0.24
Outlet Emissions


Sunflower, 98Q4
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20.0%
15.0%
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0.0%
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% Reduction
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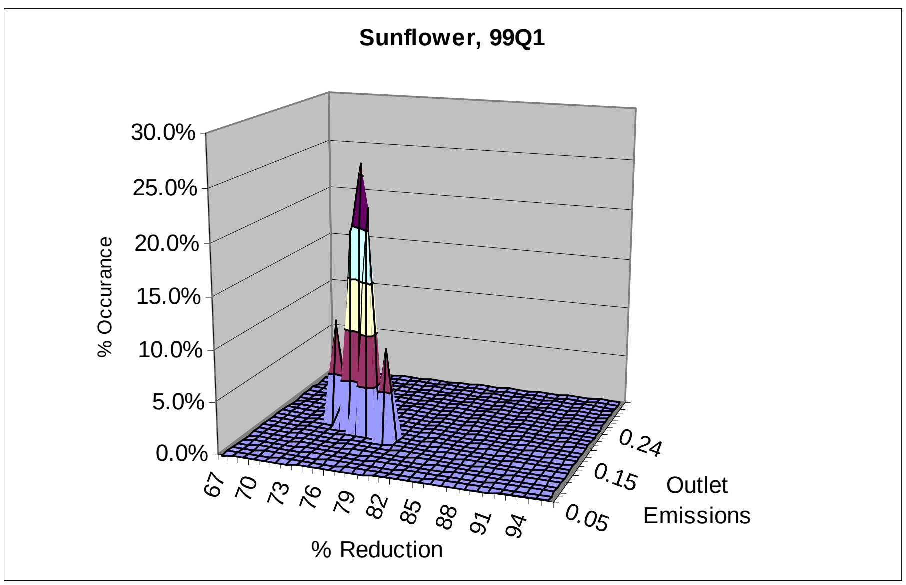
Outlet Emissions


Sunflower, 99Q1
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25.0%
20.0%
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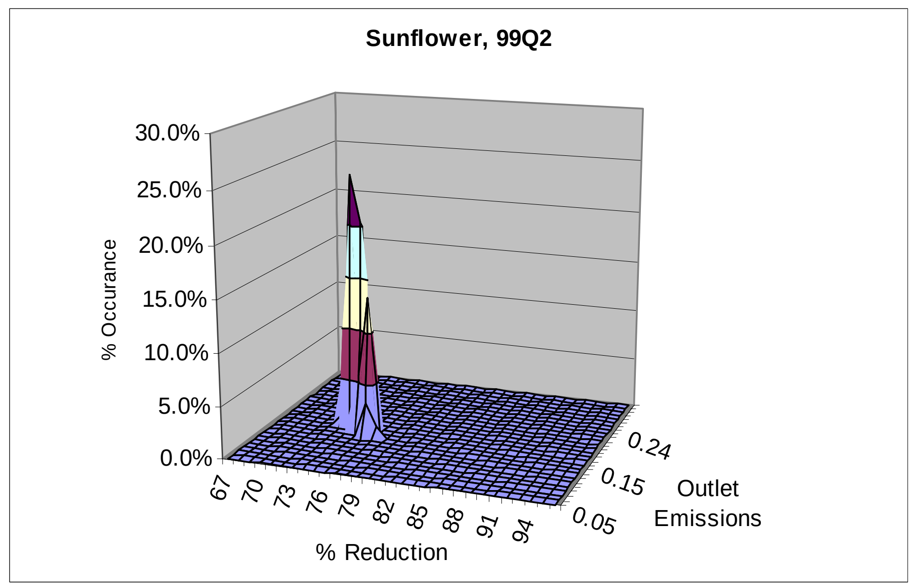
% Reduction
0.05 0.15 0.24
Outlet Emissions


Sunflower, 99Q2
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25.0%
20.0%
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10.0%
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0.0%
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% Reduction
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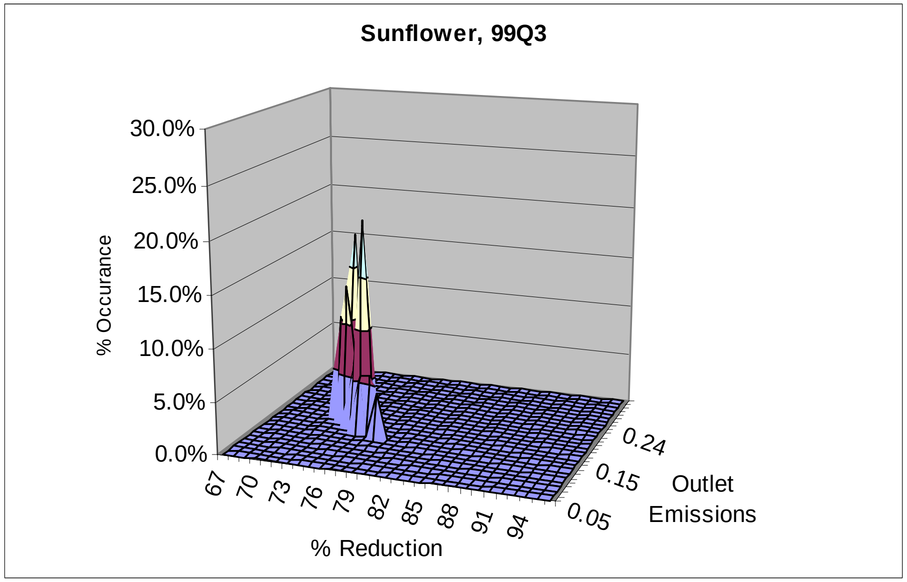
Outlet Emissions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25.0%
20.0%
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0.0%
% Occurance
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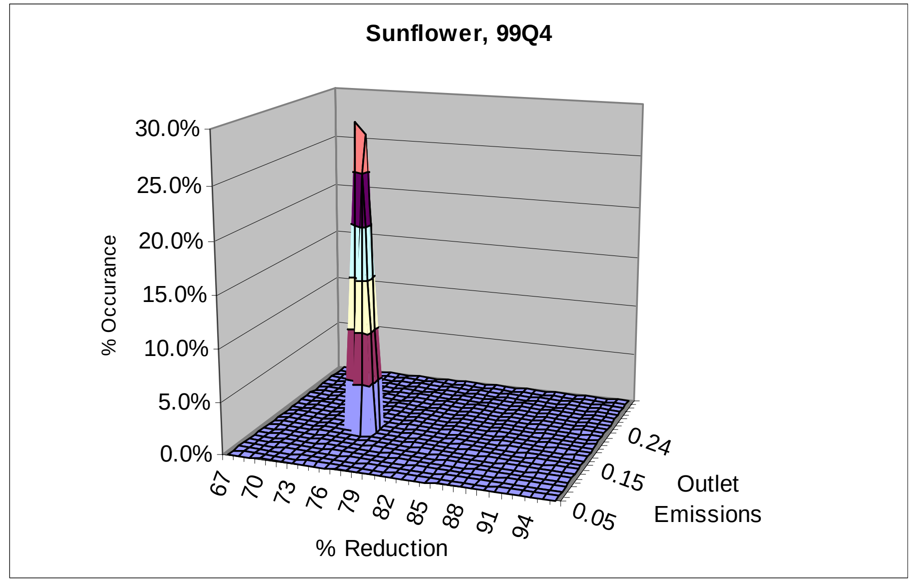
% Reduction
0.24 0.15 0.05
Outlet Emissions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20.0%
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0.0%
% Occurance
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% Reduction
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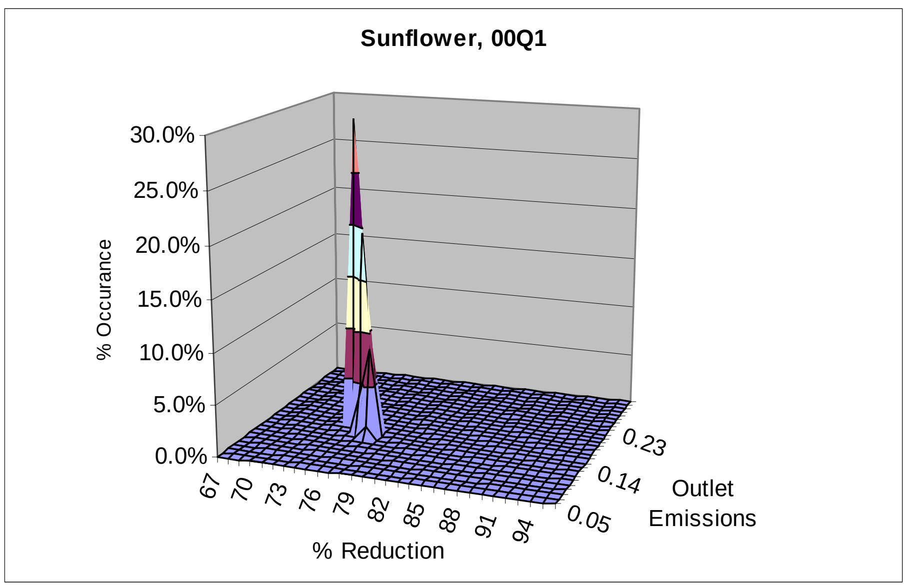
Outlet Emissions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20.0%
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0.0%
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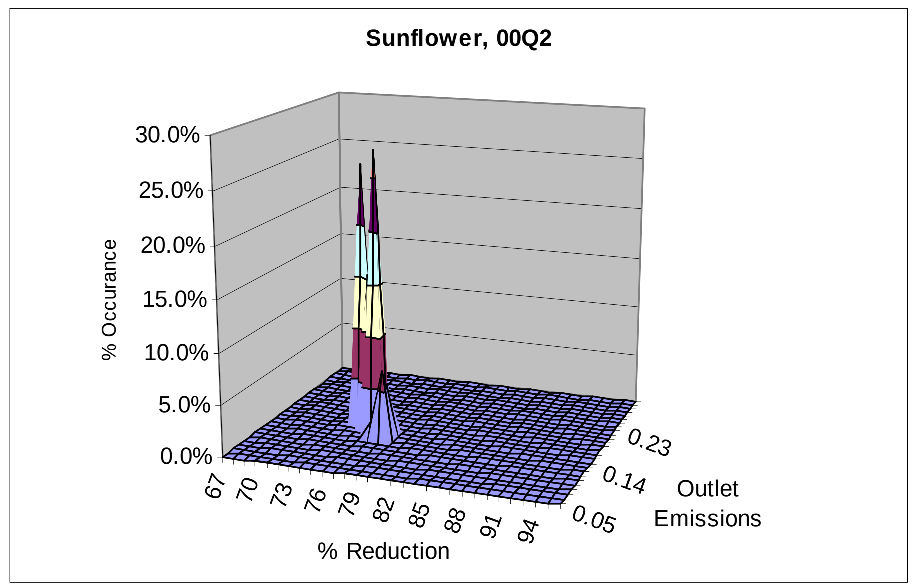
% Reduction
0.23 0.14 0.05
Outlet Emissions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20.0%
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% Occurance
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% Reduction
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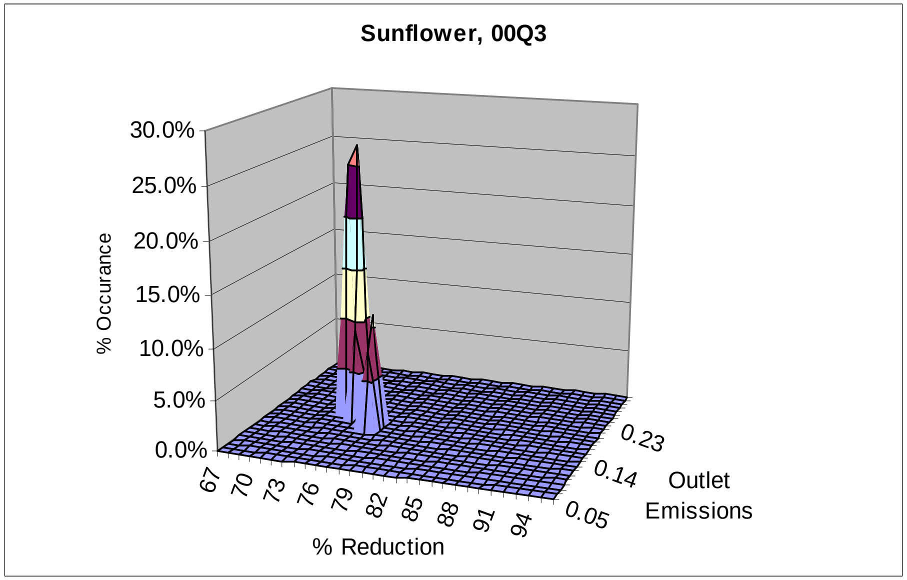
Outlet Emissions


Sunflower, 00Q3
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20.0%
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% Occurance
67 70 73 76 79 82 85 88 91 94
% Reduction
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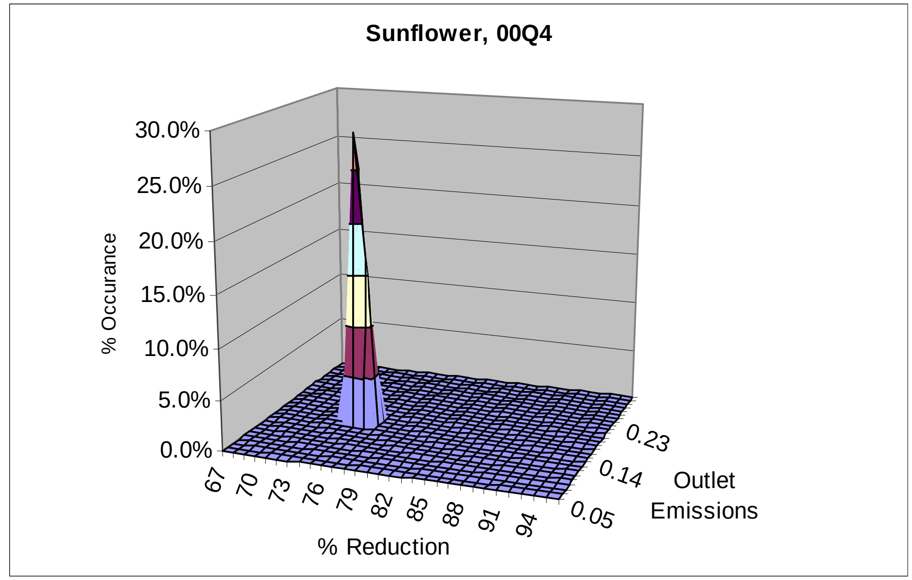
Outlet Emissions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% Occurance
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% Reduction
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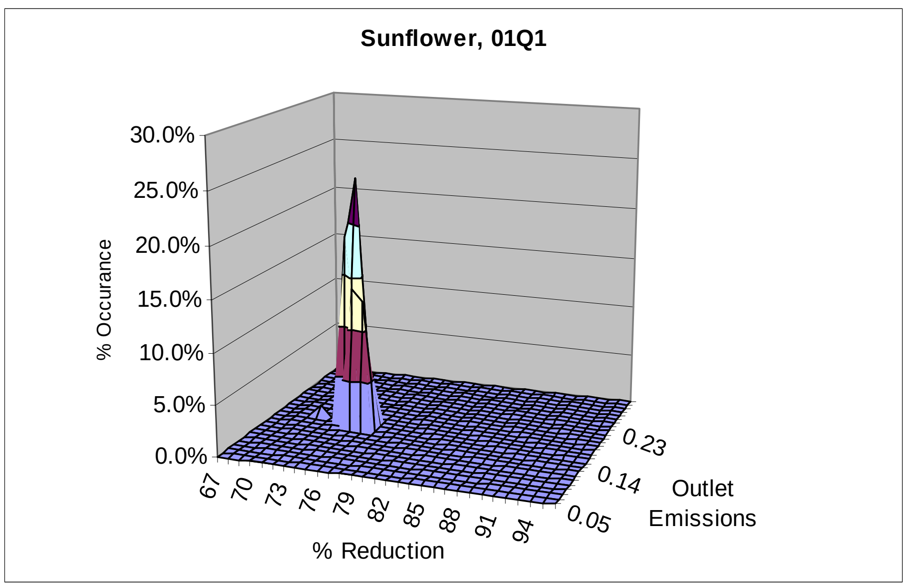
Outlet Emissions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% Occurance
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% Reduction
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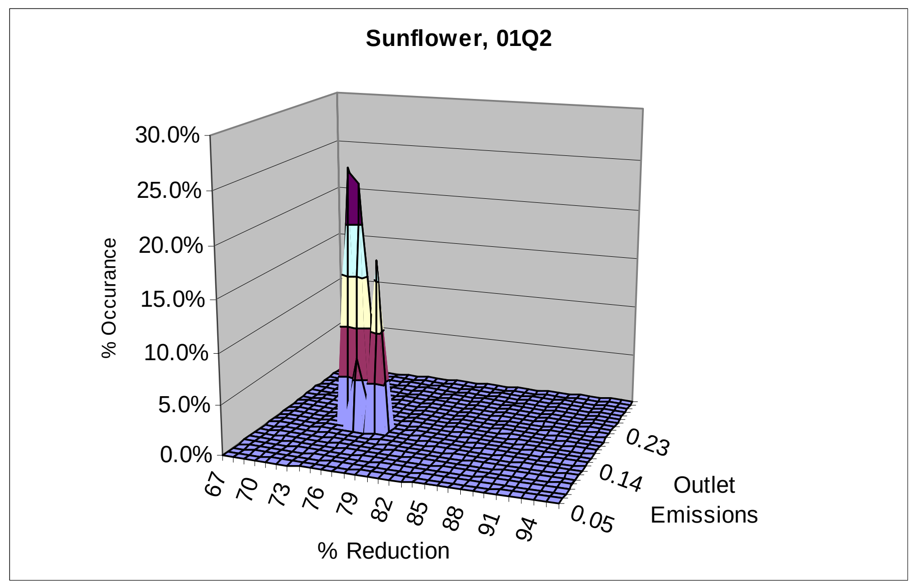
Outlet Emissions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% Occurance
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% Reduction
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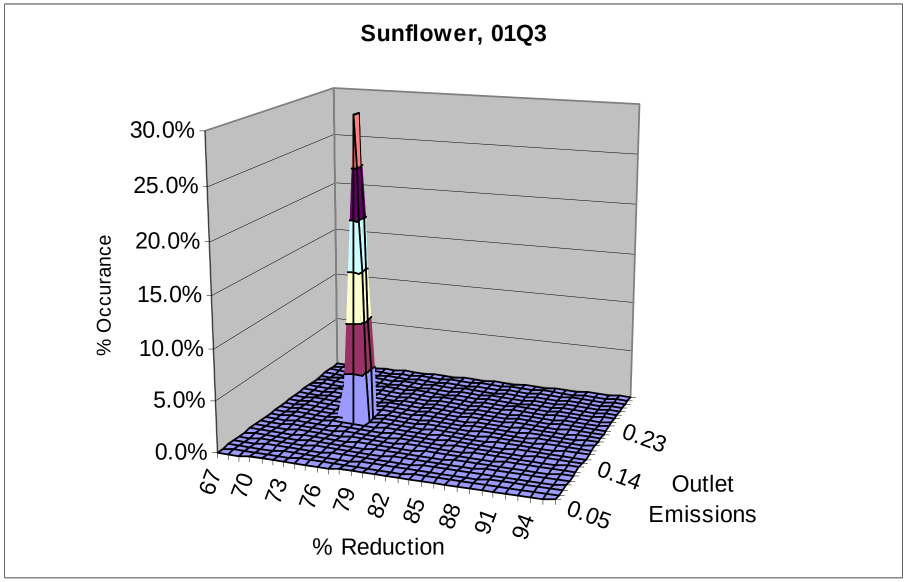
Outlet Emissions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20.0%
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% Occurance
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% Reduction
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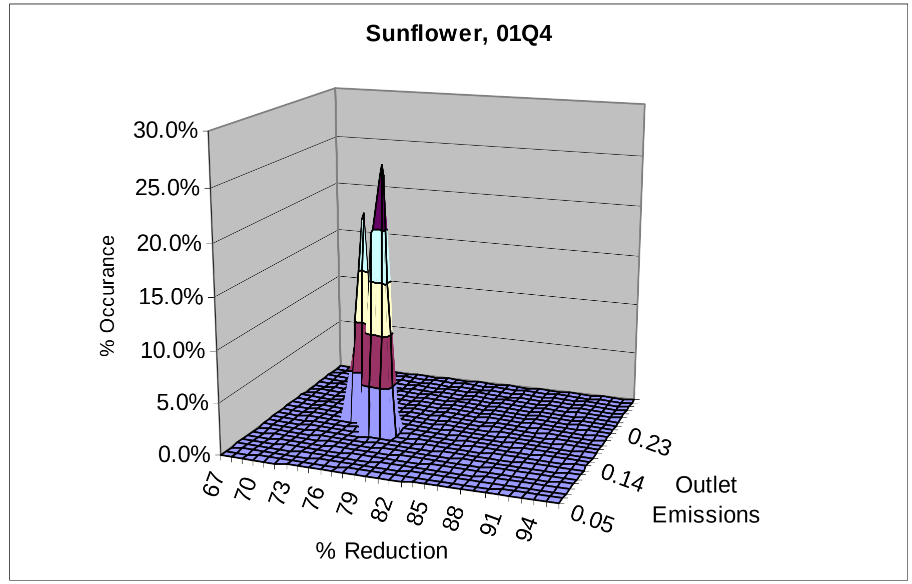
Outlet Emissions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20.0%
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% Occurance
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% Reduction
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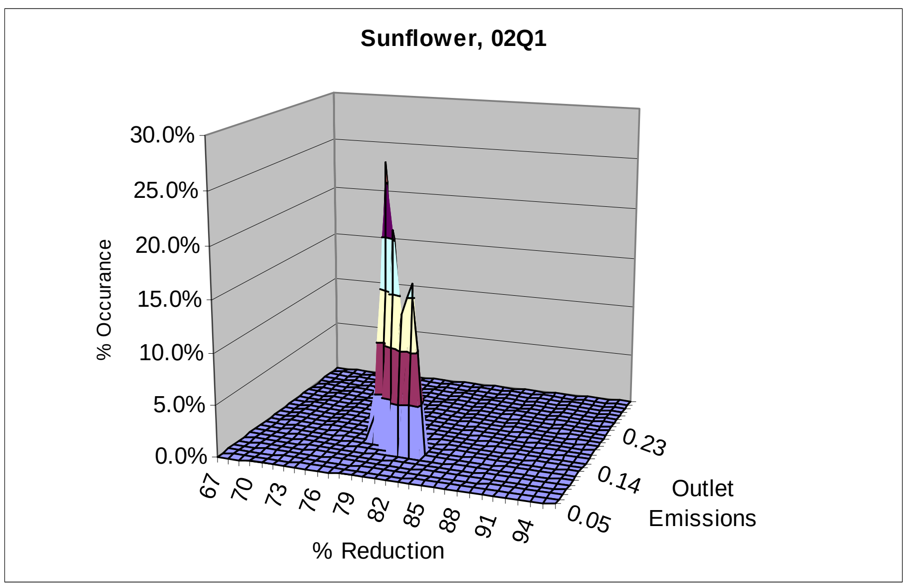
Outlet Emissions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20.0%
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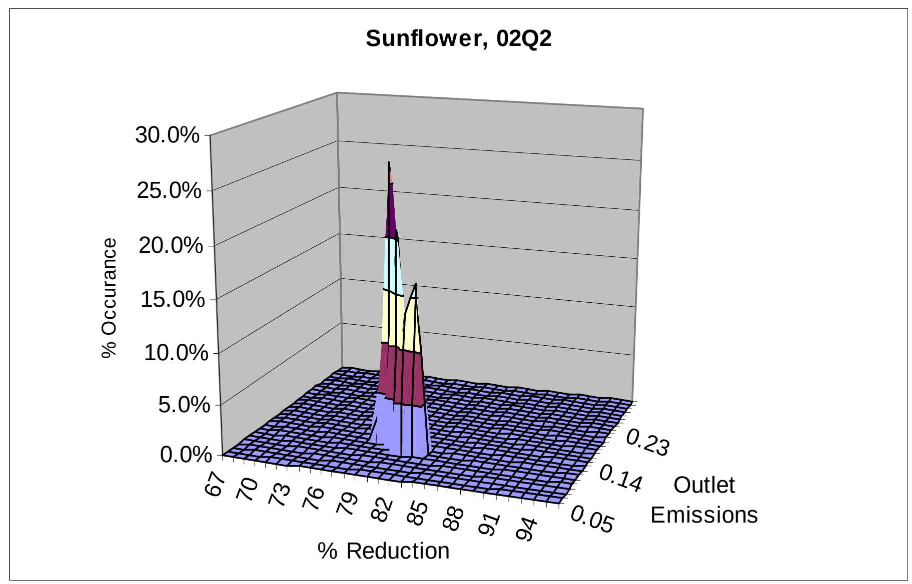
Outlet Emissions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% Occurance
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% Reduction
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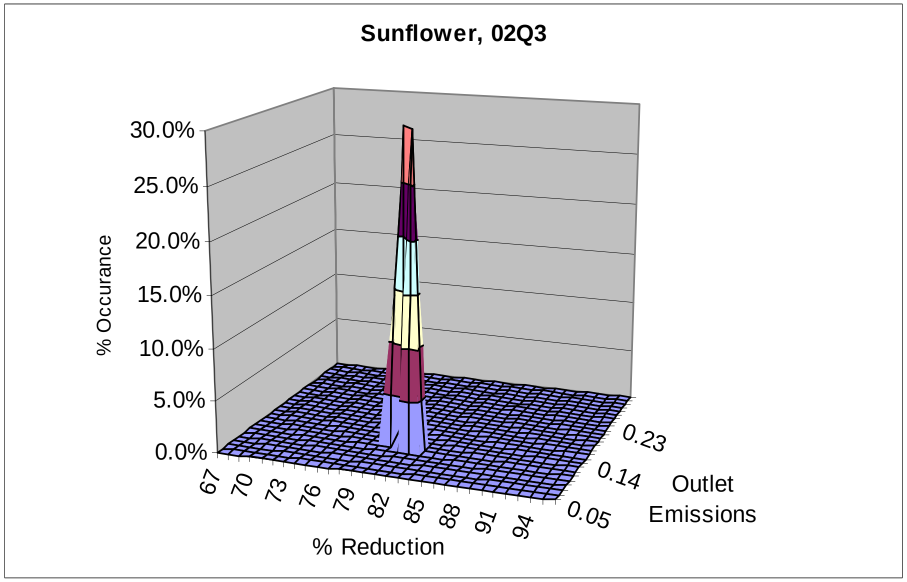
Outlet Emissions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% Occurance
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% Reduction
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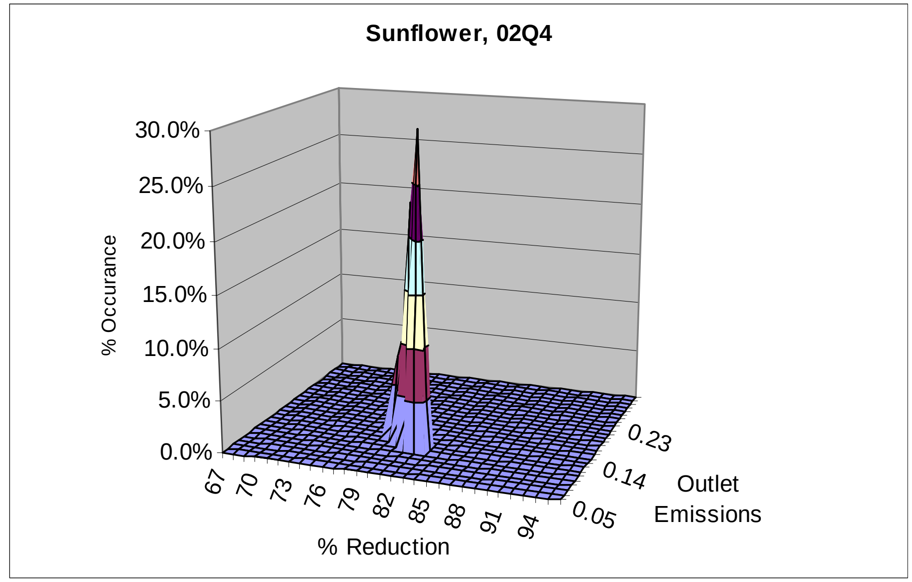
Outlet Emissions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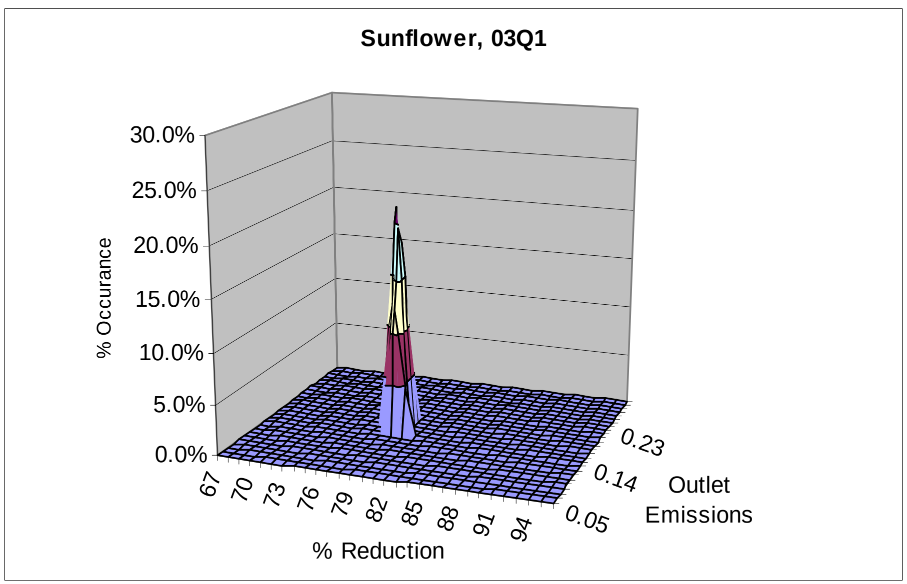
Outlet Emissions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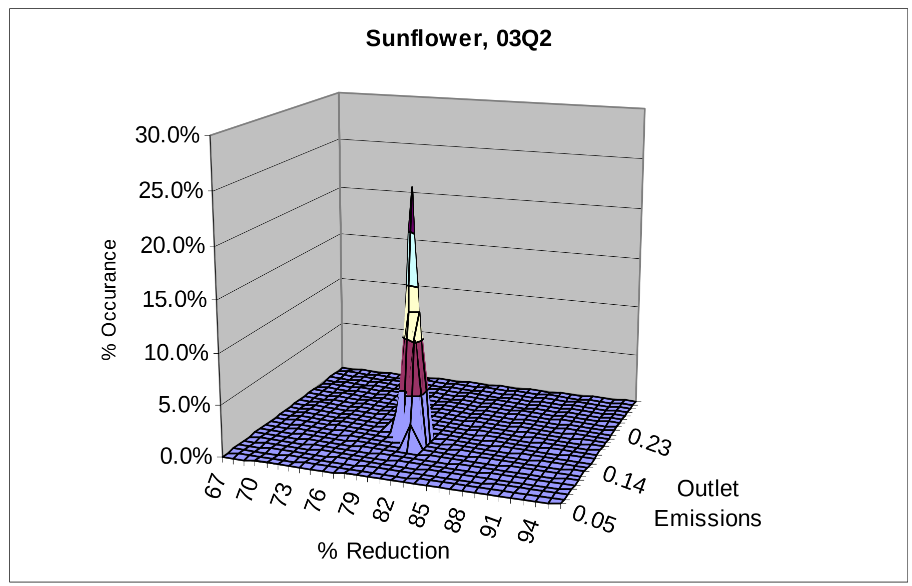
Outlet Emissions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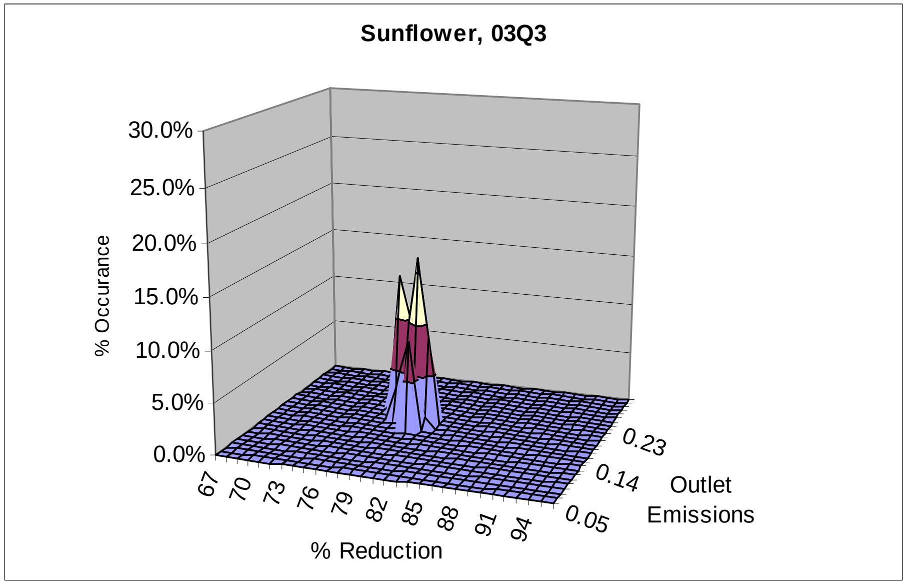
Outlet Emissions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% Reduction
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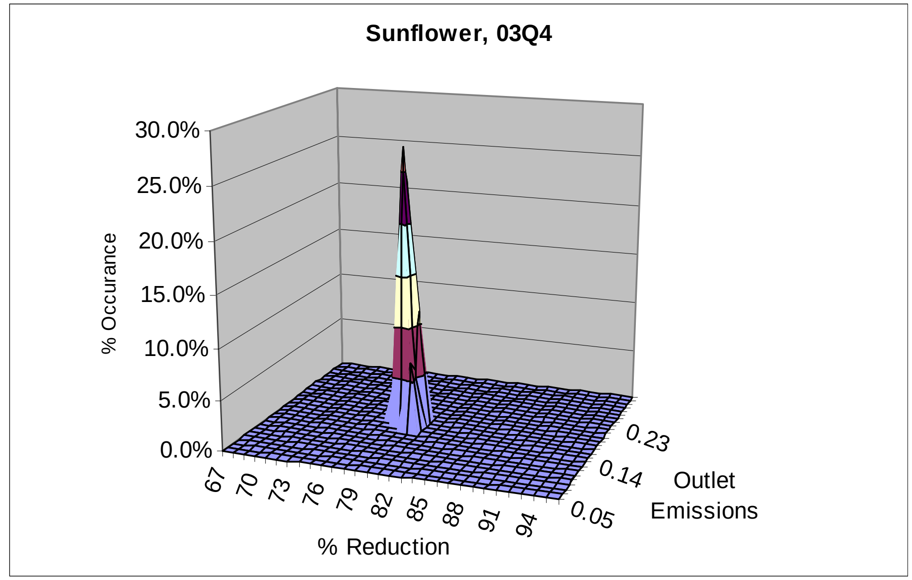
Outlet Emissions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% Reduction
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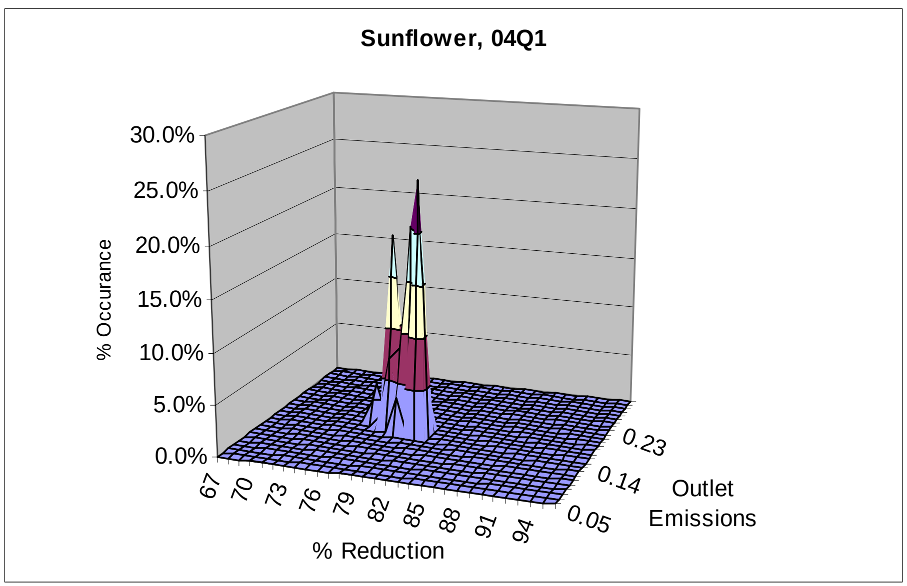
Outlet Emissions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% Reduction
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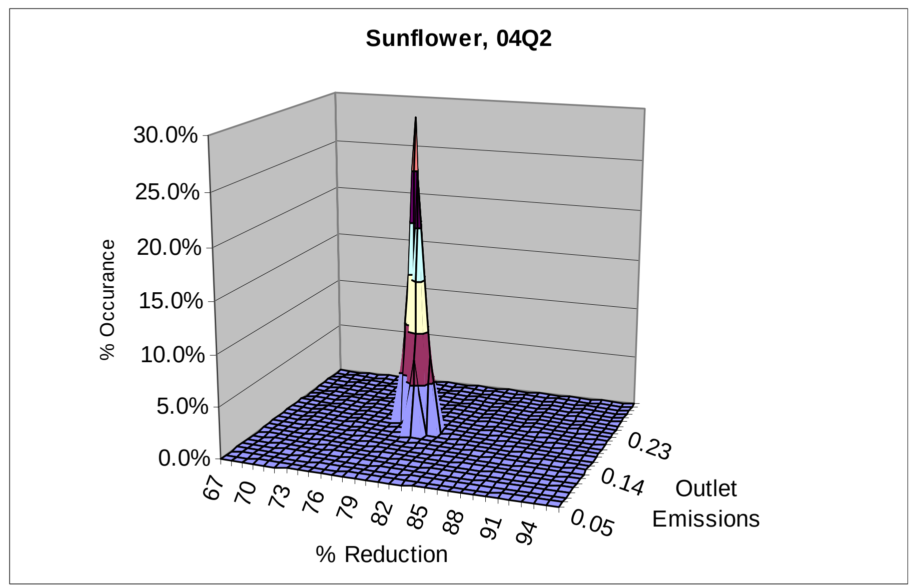
Outlet Emissions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% Reduction
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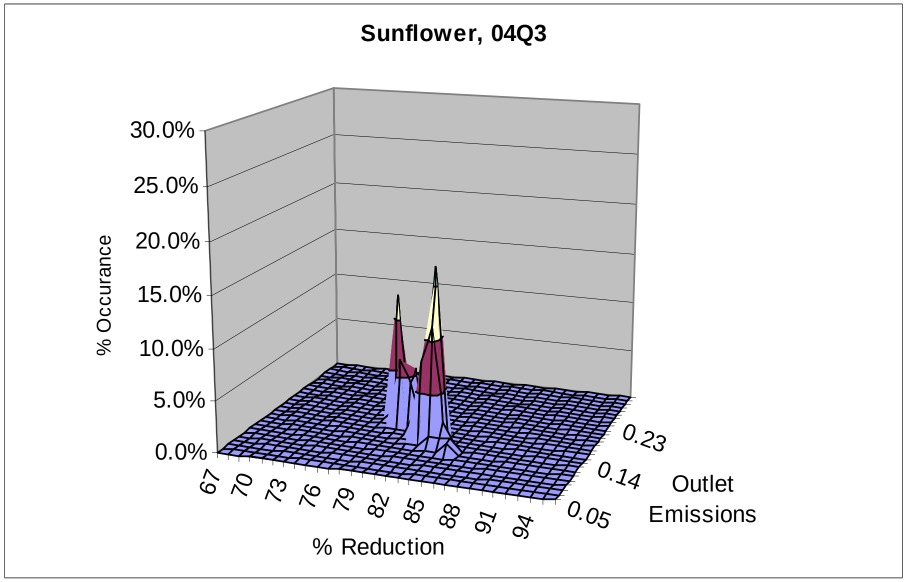
Outlet Emissions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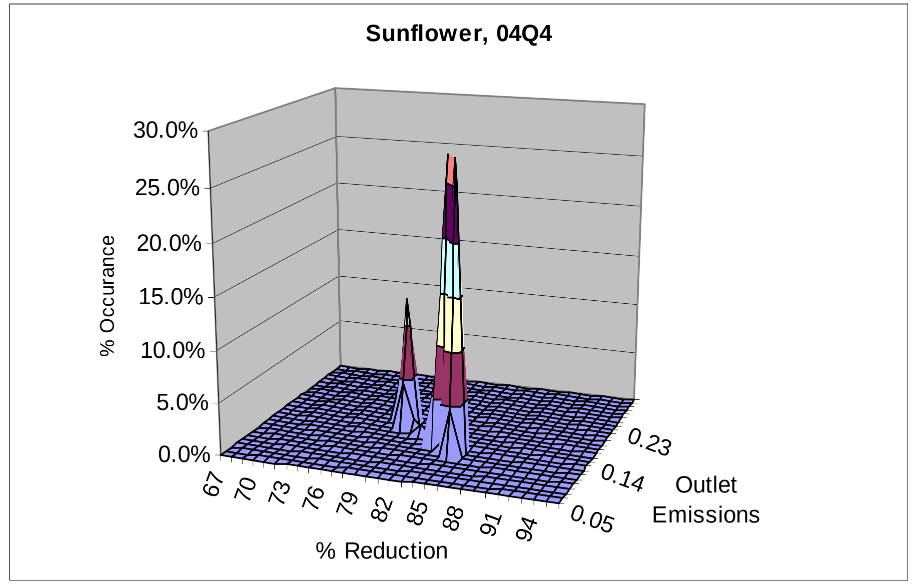
Outlet
Emissions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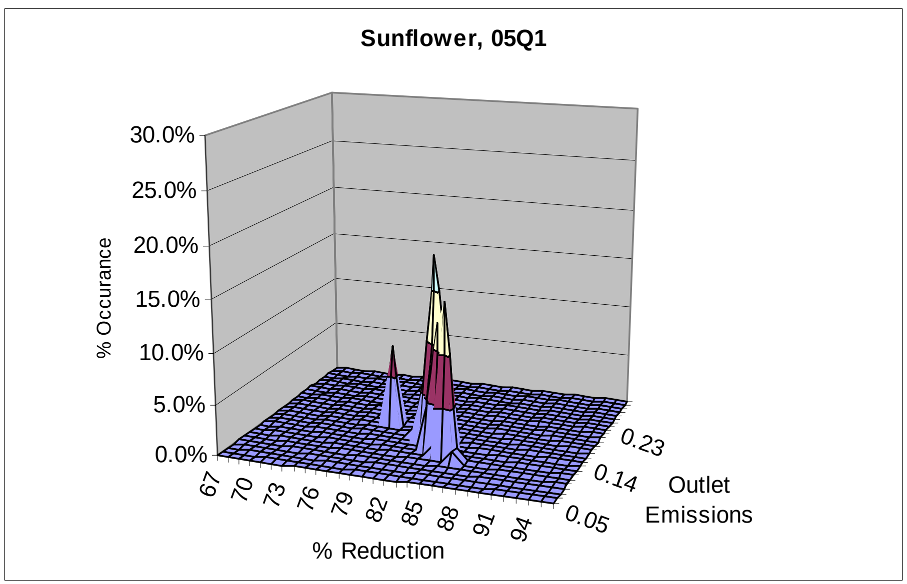
Outlet
Emissions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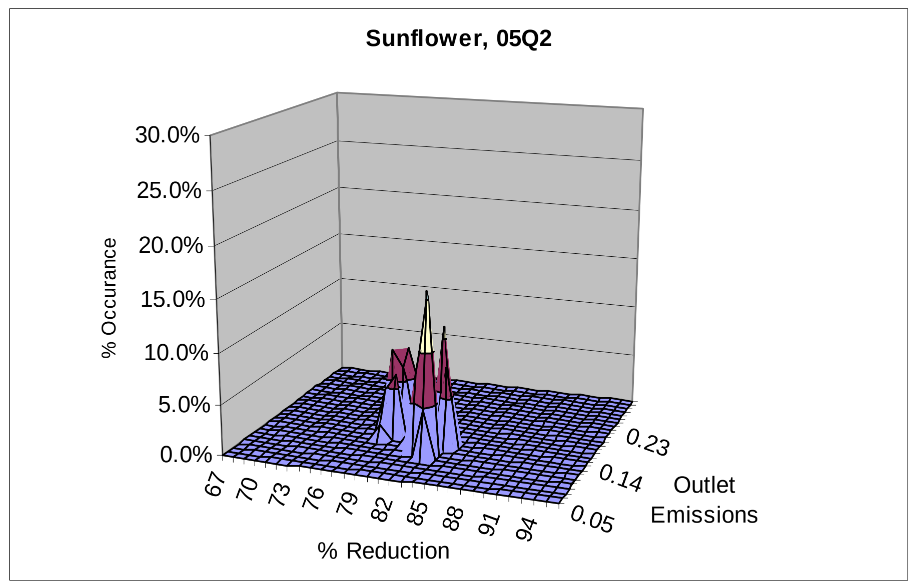
Outlet
Emissions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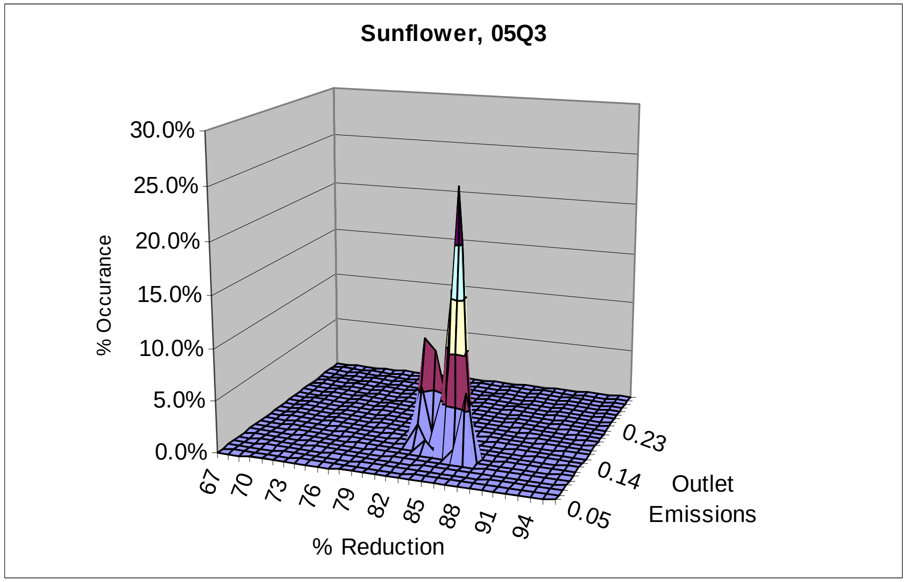
Outlet
Emissions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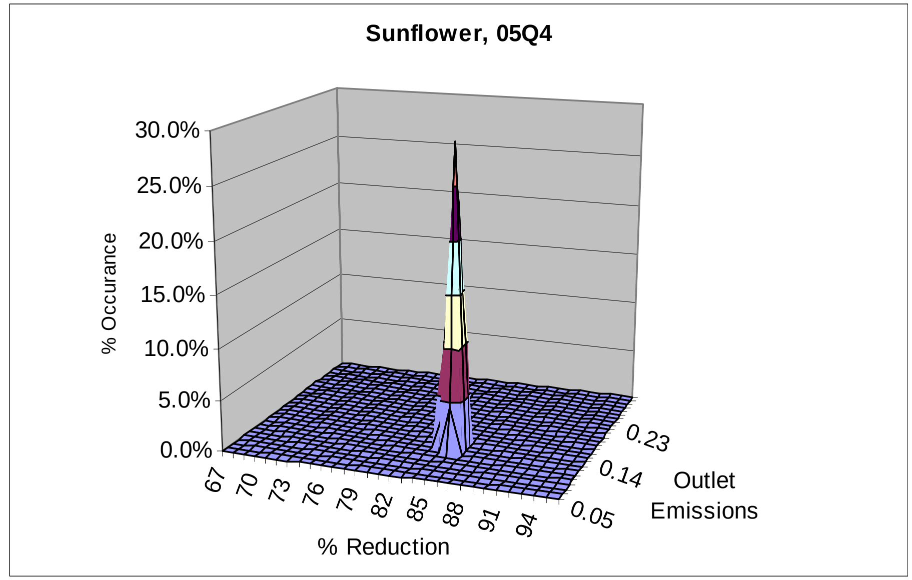
Outlet Emissions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% Occurance
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% Reduction
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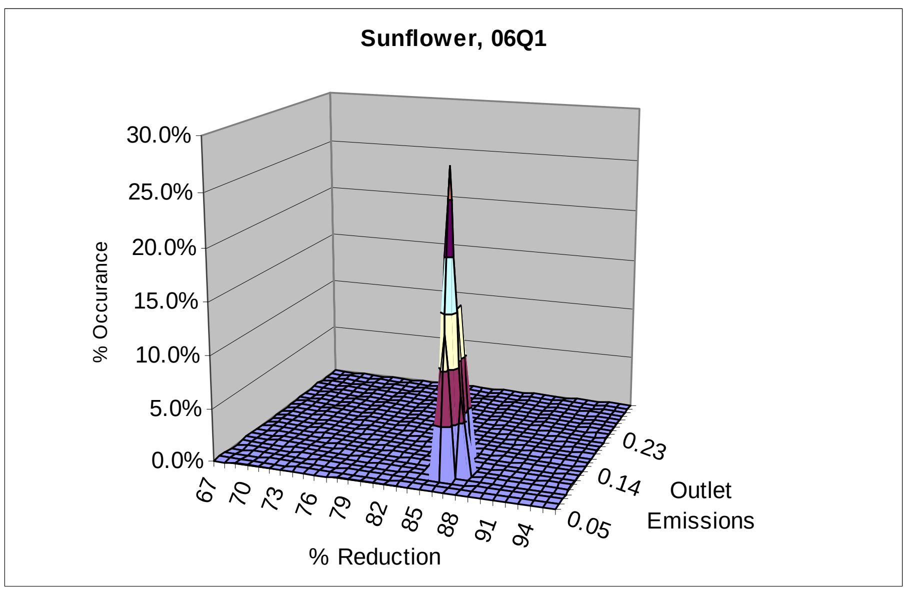
0.05
Outlet Emissions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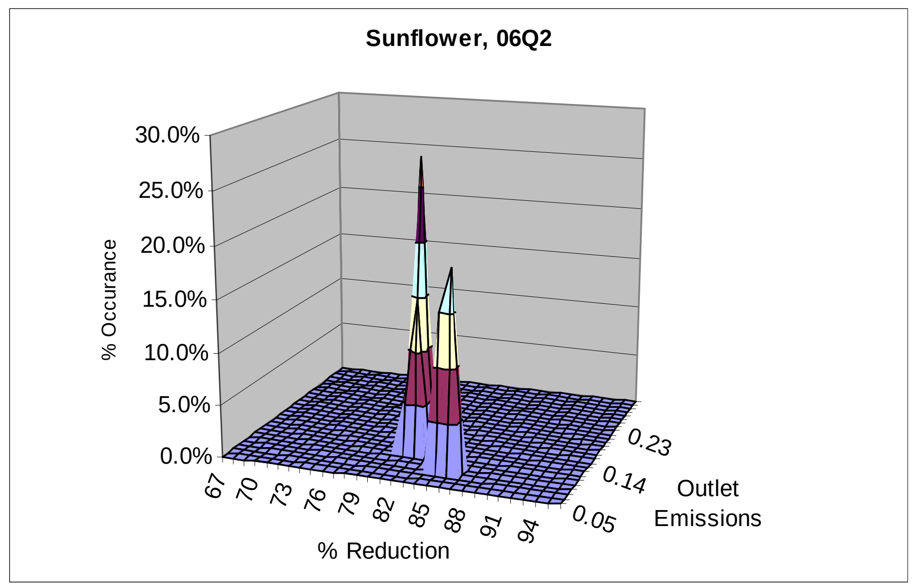
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
% Occurance
67
70
73
76
79
82
85
88
91
94
% Reduction
0.23
0.14
0.05
Outlet Emissions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20.0%
15.0%
10.0%
5.0%
0.0%
% Occurance
67
70
73
76
79
82
85
88
91
94
% Reduction
0.23
0.14
0.05
Outlet Emissions

Attachment E
Burlington Northern "Guide to Coal Mines" Analysis

"Guide to Coal Mines", Burlington Northern and Santa Fe Railway

http://www.bnsf.com/markets/coal/pdf/mineguide.pdf

Coal Region	Mine	Sulfur, %wt	GHV, Btu/lb	#SO2/mmBtu	Permitted Annual Production, million tpy	Permit Weighted #SO2/mmBtu	Annual Production, million tpy (1996)	Production Weighted #SO2/mmBtu
PRB-Montana	Decker	0.40	9,500	0.84	14		11	
PRB-Montana	Bull Mountain No. 1	0.50	10,450	0.96	6		0.3	
PRB-Montana	Absaloka	0.65	8,750	1.49	7		4.7	
PRB-Montana	Rosebud	0.80	8,750	1.83	18		8	
PRB-Montana	Big Sky	0.95	8,800	2.16	5	1.41	5	1.43
PRB-Wyoming	Rochelle	0.21	8,750	0.48	30		26.2	
PRB-Wyoming	Antelope	0.22	8,800	0.50	30		12	
PRB-Wyoming	North Rochelle	0.23	8,800	0.52	15		Planned	
PRB-Wyoming	North Antelope	0.24	8,800	0.55	35		28.6	
PRB-Wyoming	Black Thunder	0.28	8,850	0.63	44		39.2	
PRB-Wyoming	Belle Ayr	0.30	8,549	0.70	25		20	
PRB-Wyoming	Caballo Rojo	0.32	8,450	0.76	30		15.1	
PRB-Wyoming	Coal Creek	0.33	8,380	0.79	10		5.8	
PRB-Wyoming	Rawhide	0.36	8,320	0.87	24		15	
PRB-Wyoming	Cordero	0.37	8,350	0.89	24		13	
PRB-Wyoming	Caballo	0.38	8,500	0.89	35		22	
PRB-Wyoming	Dry Fork	0.37	8,175	0.91	15		2.9	
PRB-Wyoming	Buckskin	0.40	8,450	0.95	20		11.9	
PRB-Wyoming	Eagle Butte	0.41	8,350	0.98	20		15.7	
PRB-Wyoming	Jacobs Ranch	0.45	8,695	1.04	35		24.6	
PRB-Wyoming	Wyodak Clovis Point	0.42	8,050	1.04	10		0.2	
PRB-Wyoming	Fort Union	0.42	7,990	1.05	8.2	**0.76**	1	**0.74**
Colorado-NM	York Canon	0.50	12,000	0.83	6		1.3	
Colorado-NM	Lorencito	0.60	12,800	0.94	2.5		Planned	
Colorado-NM	King	0.67	12,800	1.05	0.8		0.3	
Colorado-NM	McKinley	0.54	9,907	1.09	9		5.3	
Colorado-NM	Lee Ranch	0.78	9,150	1.70	6	1.13	4.3	1.27
Illinois	Rend Lake	1.10	12,100	1.82	3.5		3.3	
Illinois	Crown II	3.35	10,700	6.26	2.5	3.54	1.7	3.21
North Dakota	Freedom	0.70	6,775	2.07			15.7	
North Dakota	Beulah	0.90	7,000	2.57	4.5	2.57	2.6	2.14
Utah	Sufco	0.35	11,450	0.61			4.2	
Utah	Deer Creek	0.41	11,615	0.71			4.3	
Utah	Bear Canyon #1	0.50	12,400	0.81			0.6	
Utah	Willow Creek	0.50	11,950	0.84	5			
Utah	Soldier Canyon	0.50	11,800	0.85			1	
Utah	Skyline	0.50	11,750	0.85			4.4	
Utah	Cyprus Plateau	0.55	11,700	0.94	3		3	
Utah	Crandall Canyon	0.60	12,300	0.98			2.5	
Utah	Aberdeen	0.60	12,000	1.00		0.88	2.5	0.82
Washington	John Henry	0.80	11,800	1.36	0.33	1.36	0.19	1.36

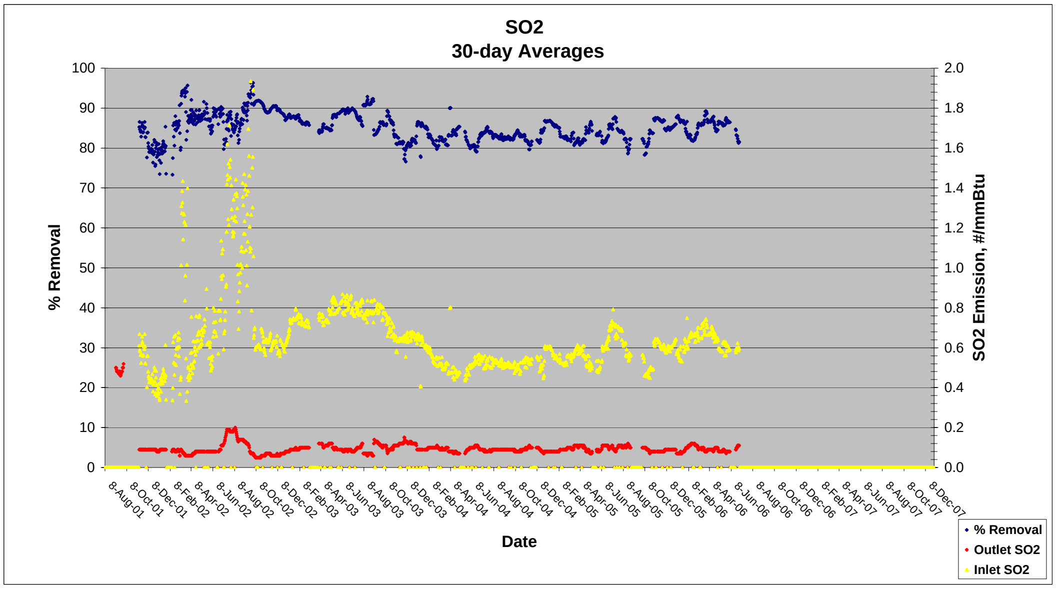
Attachment F
Portions of KCPL – Hawthorn Scrubber Analysis

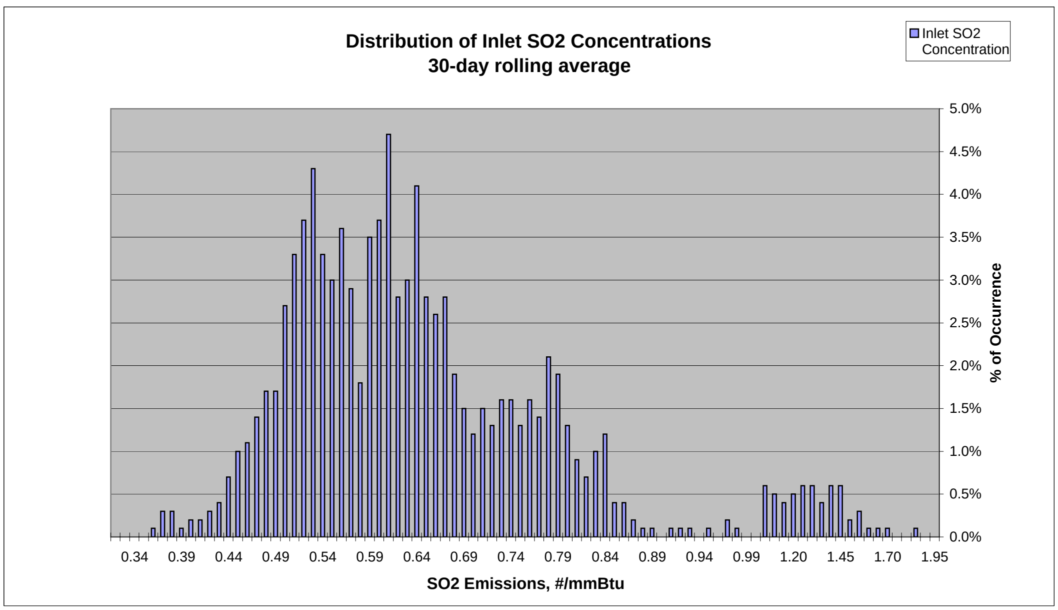
KCPL Hawthorn Unit 5A
SO2 Emissions Scrubber Performance

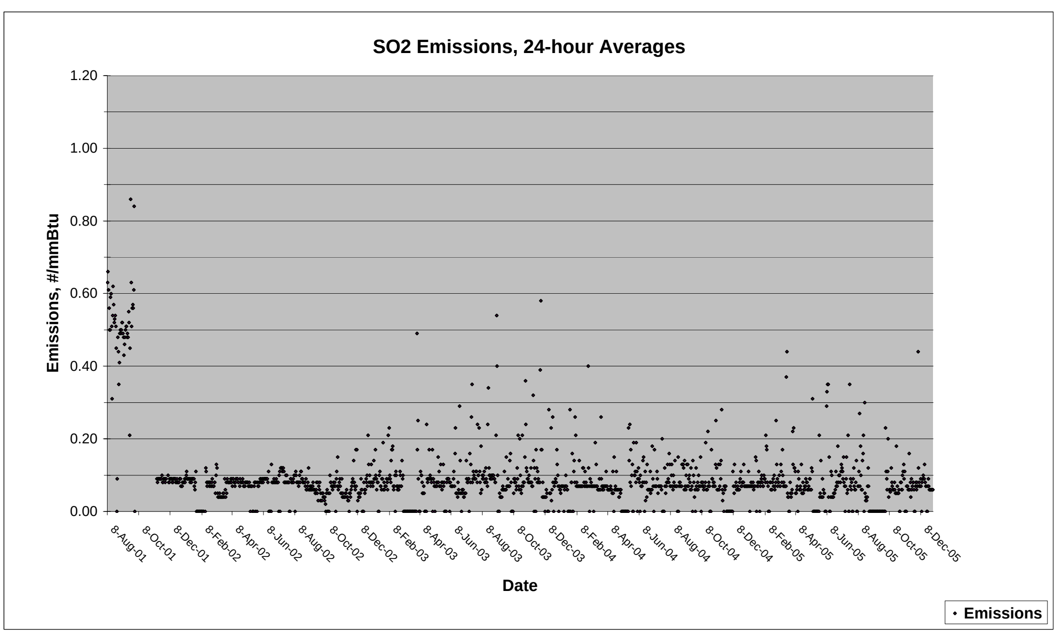
Year	Quarter	SO2 Emissions, #/mmBtu 0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
2001	1	-- Not Yet Operating --															
2001	2	-- Not Yet Operating --															
2001	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	4	0%	0%	0%	2%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	1	0%	18%	25%	53%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	2	0%	14%	23%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2002	3	0%	0%	10%	14%	14%	15%	24%	35%	45%	64%	67%	69%	71%	84%	99%	100%
2002	4	16%	63%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	1	0%	0%	0%	16%	52%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	2	0%	0%	0%	9%	48%	63%	77%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2003	3	0%	8%	34%	45%	52%	68%	81%	91%	98%	100%	100%	100%	100%	100%	100%	100%
2003	4	0%	0%	1%	6%	20%	25%	49%	84%	96%	98%	100%	100%	100%	100%	100%	100%
2004	1	0%	0%	0%	0%	49%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	2	0%	0%	20%	54%	65%	89%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	3	0%	0%	0%	20%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2004	4	0%	0%	4%	39%	68%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	1	0%	0%	0%	44%	73%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	2	0%	0%	8%	32%	44%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	3	0%	0%	0%	4%	15%	52%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2005	4	0%	0%	2%	45%	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	1	0%	0%	19%	37%	52%	72%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	2	0%	0%	1%	41%	77%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2006	3																
2006	4																
2007	1																
2007	2																
2007	3																
2007	4																

Year	Quarter	SO2 % Removal 73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
2001	1	-- Not Yet Operating --																							
2001	2	-- Not Yet Operating --																							
2001	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2001	4	100.0%	100.0%	100.0%	97.9%	93.6%	93.6%	87.2%	72.4%	57.5%	46.8%	44.7%	38.3%	25.5%	8.5%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2002	1	100%	97%	96%	96%	94%	92%	88%	78%	67%	58%	56%	54%	50%	44%	36%	29%	25%	24%	24%	21%	21%	18%	4%	1%
2002	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	92%	82%	55%	26%	13%	3%	1%	0%	0%	0%	0%
2002	3	100%	100%	100%	100%	100%	100%	100%	100%	99%	93%	90%	89%	84%	74%	63%	52%	40%	30%	24%	16%	16%	9%	6%	3%
2002	4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	90%	61%	32%	16%	0%	0%	0%	0%
2003	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	66%	48%	2%	0%	0%	0%	0%	0%	0%	0%
2003	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	87%	65%	60%	60%	43%	13%	0%	0%	0%	0%	0%	0%
2003	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	90%	83%	70%	59%	51%	44%	34%	11%	1%	0%	0%	0%
2003	4	100%	100%	100%	100%	100%	96%	95%	94%	89%	58%	44%	33%	31%	31%	16%	10%	5%	0%	0%	0%	0%	0%	0%	0%
2004	1	100%	100%	100%	100%	100%	100%	98%	98%	94%	71%	46%	26%	26%	16%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	2	100%	100%	100%	100%	100%	100%	100%	94%	82%	65%	55%	34%	21%	6%	6%	6%	6%	6%	0%	0%	0%	0%	0%	0%
2004	3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	70%	31%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2004	4	100%	100%	100%	100%	100%	100%	100%	100%	97%	84%	57%	31%	9%	4%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	71%	51%	44%	30%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	82%	53%	38%	18%	11%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2005	3	100%	100%	100%	100%	100%	100%	100%	94%	88%	85%	63%	63%	38%	29%	17%	6%	0%	0%	0%	0%	0%	0%	0%	0%
2005	4	100%	100%	100%	100%	100%	100%	96%	93%	90%	84%	77%	77%	62%	35%	32%	4%	0%	0%	0%	0%	0%	0%	0%	0%
2006	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	89%	72%	65%	62%	34%	18%	6%	0%	0%	0%	0%	0%	0%	0%
2006	2	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	93%	88%	81%	74%	39%	5%	0%	0%	0%	0%	0%	0%	0%	0%
2006	3																								
2006	4																								
2007	1																								
2007	2																								
2007	3																								
2007	4																								

KCPL Hawthorn Unit 5A







Attachment G
Excerpt from City Utilities of Springfield
"BACT Emission Limitations for PC Boilers Firing Western Subbituminous Coal"

BACT Emission Limitations for PC Boilers Firing Western Subbituminous Coal

Sulfur Dioxide Emissions:

The BACT analysis that City Utilities submitted to the Missouri DNR concluded that BACT for SO_2 at Southwest Unit 2 was 0.12 lbs/mmBtu on a 30-day rolling average basis. This conclusion was based on the proven control capabilities of dry FGD systems on PRB coal-fired units.

Subsequent to the submittal of the PSD permit application, MDNR has requested that City Utilities investigate the feasibility of achieving an SO_2 emission level of 0.10 lbs/mmBtu with a dry FGD system.

Evaluating the feasibility of achieving an SO_2 emission rate of 0.10 lbs/mmBtu for Southwest Unit 2 is a two step process. The first step is to consider the technical feasibility of meeting the 0.10 lb/mmBtu limit. If it is determined to be technically feasible, then environmental, energy and economic factors are considered.

Technical Feasibility

The technical feasibility evaluation must consider the potential fuels that may be fired at Southwest Unit 2. CU is planning on firing PRB coals in the unit which inherently have low sulfur content. As part of the original BACT analysis, potential sources of the PRB-coal were evaluated. This evaluation determined that fuel for Southwest Unit 2 may have sulfur content up to 0.60 percent with a higher heating value of 8200 Btu/lb. This corresponds to maximum uncontrolled emissions of 1.462 lbs of SO2/mmBtu. The original fuel analysis for Southwest Unit 2 remains valid and is the basis for evaluating achieving an emission rate of 0.10 lbs/mmBtu for the unit.

The next area to consider when evaluating the feasibility of achieving SO2 emissions of 0.10 lbs/mmBtu is the removal capabilities of dry FGD. Virtually all dry FGD systems installed on units over 100 MW are spray dryers. Spray dryers include either rotary atomizers or dual fluid nozzles to atomize the lime slurry to achieve good gas-to-liquid contact.

Good gas-to-liquid contact is essential to obtain high control efficiencies. The maximum control efficiency that has been guaranteed for a spray dryer/fabric filter FGD system installed on a coal-fired utility boiler is 94 percent (Hawthorn 5 – 94%, Council Bluffs 4 – 93.6%). These are very large units that require multiple absorber modules. Having multiple absorber modules provides an additional level of redundancy which is not practical for smaller units such as Southwest Unit 2.

Obtaining this high removal efficiency is dependent not only on good gas-to-liquid contact, but, also on how closely the absorber outlet temperature approaches the adiabatic saturation temperature. Operating closer to the adiabatic saturation temperature allows higher SO_2 control efficiencies.

There are process limitations on how close a spray dryer can be operated to the adiabatic saturation temperature. If the outlet temperature from a spray dryer is too close to the saturation temperature, a number of operating problems will occur. These include build-up in the absorber modules, blinding of fabric filter bags, corrosion in the fabric filter and ductwork, and operating and maintenance problems with the fly ash handling system.

The limit on how close a spray dryer outlet temperature can safely approach the adiabatic saturation temperature is around 25 degrees F. Operating at closer approach temperatures results in severe operating problems. Most spray dryers are operated with outlet temperatures 30-40 degrees above the saturation temperatures. Even at these higher operating temperatures, absorber build-up, corrosion of the fabric filter and ductwork and fly ash handling issues have been common problems for dry FGD systems.

Continuously maintaining 94 percent control on a unit with a dry FGD would be difficult, if not impossible, to accomplish and has not been demonstrated on any existing unit. Achieving 94 percent control requires a well designed absorber that has good liquid-to-gas contact and the ability to continuously operate at an approach temperature 25 degrees F above saturation. There are no utility units with spray dryers that continually operate at control efficiencies approaching 94 percent. There are a very few facilities that have been continuously able to achieve a SO_2 control efficiency of 90 percent.

The large majority of coal-fired utility installations have used rotary atomizers. Installations with rotary atomizers have been more successful in achieving high removal efficiencies than units with dual fluid nozzles. Atomizers (rotary and dual fluid nozzle) are high maintenance pieces of equipment, that are subject to severe erosion and pluggage conditions. Periodically, the atomizers must be changed out for inspection and cleaning. During change out of the atomizers, SO_2 emissions from the unit will be higher.

Most operators of spray dryers have an established maintenance program to change out the atomizers for inspection, cleaning and repair on a regularly scheduled basis. It is common to change rotary atomizers out at monthly intervals. Dual fluid nozzles are likely to require more frequent change out. In addition to normal atomizer maintenance, it is relatively common for emergency conditions to occur at spray dryer facilities that require the immediate change out of atomizers.

According to manufacturers, a planned change-out of an atomizer should take 2 to 3 hours to complete. Change out of an atomizer under emergency conditions will likely take longer. Typically, a spray dryer may be out of service 2 to 3 hours per month to allow for scheduled atomizer maintenance. However, it is fairly common for a spray dryer to be out of service for additional hours in a month due to unanticipated equipment problems and maintenance.

Establishing a permitted emission rate for a unit needs to take into account the maximum sulfur fuel that can be fired and the impact of normal and common maintenance activities. Several scenarios were developed to evaluate the impact of spray dryer operating conditions that may be reasonably expected to occur in the course of a year.

The first scenario evaluated assumed an accumulation of 10-hours of spray dryer outage during a 30-day averaging period. During the remainder of the month, the spray dryer was assumed to operate at the maximum achievable control efficiency for a spray dryer of 94 percent. This scenario is summarized in Table No. 1:

Table No. 1

Hours of Operation	**SO2 Emission Rate (lbs/mmBtu)**
710	0.088
10	1.462
30-Day Average	0.107

Table No. 2 illustrates the emissions that would result during a 30-day period from a scenario if only one scheduled atomizer change out is required and during the remainder of the month a control efficiency of 94 percent is maintained.

Table No. 2

Hours of Operation	**SO2 Emission Rate (lbs/mmBtu)**
717	0.088
3	1.462
30-Day Average	**0.094**

The scenarios provided in Tables 1 and 2 assume that a SO_2 removal efficiency of 94 percent can be continuously maintained when the spray dryer is in service. This is not a technically feasible assumption. A 94 percent control level is the best that can be accomplished with a spray dryer/fabric filter system. It requires that the absorber outlet temperature be maintained within 25 degrees of the adiabatic saturation temperature. Continuous operation at this temperature can result in severe operating problems and reduced control equipment reliability. Unexpected operating conditions will occur to prevent peak removal efficiency.

In order to further evaluate the control capabilities of operating spray dryer/ fabric filter systems, 2003 CEMS data were reviewed from a number of units that were designed to achieve SO_2 control levels above 90 percent. This review of CEMS data revealed that the highest continuous SO_2 control level maintained on any of the units was approximately 90 percent (Tri-States Craig 3, Platte River Rawhide). A continuous control level of slightly under 90 percent has been maintained on Hawthorn 5.

Table No. 3 provides projected emissions for a 30-day period with only a normal, scheduled atomizer change out and maintaining 90 percent control efficiency during the remainder of the month.

Table No. 3

Hours of Operation	SO_2 Emission Rate (lbs/mmBtu)
717	0.146
3	1.462
30-Day Average	**0.151**

Although the highest demonstrated continuous SO_2 control level achieved by units with spray dryers/fabric filters is approximately 90 percent, we believe that with proper design operation and maintenance, somewhat higher levels of control can be maintained. Table No. 4 provides projected monthly emissions with only one scheduled, normal atomizer change out and 92 percent control for the remainder of the period.

Table No. 4

Hours of Operation	SO_2 Emission Rate (lbs/mmBtu)
717	0.117
3	1.462
30-Day Average	**0.123**

Table No. 5 provides a summary of the spray dryer operating scenarios.

Table No. 5

Scenario	Operating Removal Efficiency (%)	Spray Dryer Outage Hrs./Month	30-Day Average Emissions (lbs/mmBtu)
1	94	10	0.107
2	94	3	0.094
3	90	3	0.151
4	92	3	0.123

The above scenarios illustrate that it is unlikely that a 30-day rolling SO_2 average of 0.10 lbs/mmBtu could be achieved at Southwest Unit 2. A 3-hour spray dryer outage during a month adds over 0.006 lbs/mmBtu to the 30-day rolling average emissions. Achieving an emission rate of 0.10 lbs/mmBtu requires 94 percent control and monthly spray dryer outages limited to one 3-hour period for normal, scheduled atomizer maintenance. Even achieving an emission rate of 0.12 lbs/mmBtu requires the control efficiency to be maintained above 92 percent and the atomizer change outs limited to one per 30-day period.

Conclusions

Southwest Unit 2 is projected to have a service life of over 30-years. During this life span the unit must be continuously operated within the emission limits required by the operating permit. The permit limit established by BACT must not be lower than is technically feasible for the control method.

In the above analysis, consideration has been given to the technical feasibility of maintaining a SO_2 emission rate of 0.10 lbs/mmBtu with a spray dryer/fabric filter system on Southwest Unit 2. Achieving an emission rate of 0.10 lbs/mmBtu on a 30-day rolling average basis requires continual operation at a 94 percent control level with only one atomizer change out during a 30-day averaging period. This scenario is not technically feasible for Southwest Unit 2.

Attachment H
Excerpts from
Draft PSD permit for Longleaf Energy Associates, LLC
C/o LS Power Development, LLC
http://www.air.dnr.state.ga.us/airpermit/psd/dockets/longleaf/index.htm

Conclusions for SO_2

[Excerpted from Georgia DNR "Preliminary Determination" for LS Power Longleaf Energy draft PSD permit.]

The Division has determined that the proposal to use a dry scrubber in combination with burning of low sulfur PRB coal to meet the requirements of BACT is acceptable. The Division has determined that the proposed SO_2 BACT emission limit of 0.12 lb/mmBtu is not acceptable. The Division has reviewed a permit for Newmont Nevada Energy Investments, LLC which details an innovative two-tiered SO_2 BACT limit. This two-tiered limit has different limits based on the sulfur content of the coal. If Longleaf accepts this two-tiered SO_2 limit it would be the third most stringent SO_2 emission limit for Pulverized Coal Boilers burning low sulfur western or PRB Coal. The Division proposed this two tiered limit to Longleaf in a letter dated February 23, 2006 requesting that Longleaf examine this approach and develop a similar tiered limit for the facility. Longleaf responded in a letter dated February 23, 2006 with the following three tiered SO_2 BACT limit.

· For uncontrolled SO_2 emissions less than or equal to 1.0 lb/mmBtu, the PC-fired boilers will not exceed 0.065 lb/mmBtu (30-day rolling average)
· For uncontrolled SO_2 emissions greater than 1.0 but less than 1.25 lb/mmBtu, the PC-fired boilers will not exceed 0.08 lb/mmBtu (30-day rolling average)
· For uncontrolled SO_2 emissions greater than 1.25 but less than 1.6 lb/mmBtu, the PC-fired boilers will not exceed 0.105 lb/mmBtu (30-day rolling average)
· The PC-fired boilers will not exceed 0.12 lb/mmBtu on a 24-hour average.
· The scrubbers will maintain 93.5% removal of SO_2.

The SO_2 BACT emission limit is set as stated above. The Division believes that this determination is consistent with recent BACT determinations.

Condition 2. Allowable Emissions

[Excerpted from Georgia DNR "Draft Permit" for LS Power Longleaf Energy project]

2.14 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from each PC-Fired Boiler, S01 and S02, any gases which

d. Contain sulfur dioxide in excess of 0.065 lb/mmBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is less than or equal to 1 lb/mmBtu on a 30-day rolling average. [40 CFR 52.21(j); 40 CFR 60.43a(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]

e. Contain sulfur dioxide in excess of 0.08 lb/mmBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is greater than 1 lb/mmBtu but less than 1.25 lb/mmBtu on a 30-day rolling average. [40 CFR 52.21(j); 40 CFR 60.43a(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]

f. Contain sulfur dioxide in excess of 0.105 lb/mmBtu on a 30-day rolling average when the uncontrolled sulfur dioxide emission rate is greater than 1.25 lb/mmBtu but less than 1.6 lb//mmBtu on a 30-day rolling average. [40 CFR 52.21(j); 40 CFR 60.43a(i)

(subsumed); 391-3-1-.02(2)(d) (subsumed)]
g. Contain sulfur dioxide in excess of 0.12 lb/mmBtu on a 24-hour average. [40 CFR 52.21(j); 40 CFR 60.43a(i) (subsumed); 391-3-1-.02(2)(d) (subsumed)]

EXHIBIT 7

TRANSMITTAL NOTICE: 2-88

September 8, 1988

MEMORANDUM

SUBJECT: EPA Region IX Policy on PSD Permit Extensions

FROM: Wayne Blackard, Chief
New Source Section

TO: Region IX States and Districts
NSR/PSD Permitting Contacts

Attached for your information is a copy of a guidance document prepared by my staff addressing EPA Region IX's policy on PSD permit extensions. The purpose of this document is to clarify the criteria EPA examines prior to extending the 18-month commencement of construction deadline found in 40 CFR 52.21 (r)(2). At the heart of these requirements are assurances of current BACT determinations and continued public participation when permits are extended. Our hope is that this policy will enhance agreement among permitting agencies in implementing PSD regulations.

We hope you will find this document helpful. If you have any questions, please contact me at (415) 974-8249.

EPA Region IX
New Source Section
Guidance Document: 1-88
Date: 3/23/88 (PMF)
Revised: 7/6/88

EPA REGION IX POLICY

ON

PSD PERMIT EXTENSIONS

The following is EPA Region IX's policy regarding Prevention of Significant Deterioration (PSD) permit extensions. This policy clarifies the subject of extensions of the 18-month commencement of construction deadline found in 40 CFR 52.21 (r) (2).

The intent of this policy is to grant a permit extension of the 18-month deadline to any good faith application, provided the following requirements are met. If these requirements are not met or if the extension request is denied, the permit will become invalid after its expiration date. The applicant, however, may choose to file a project application for consideration as a new permit. In general, the import of this policy is to ensure that the proposed permit meets the current EPA requirements, and that the public is kept apprised of the proposed action (i.e. through the 30-day public comment period).

I. ADMINISTRATIVE REQUIREMENTS

(1) Submittal
An extension request must be submitted and received by EPA-Region IX prior to the expiration date of the permit.

(2) Justification
The extension request must include an acceptable justification why the commencement of construction did not commence as scheduled. The request must also include a revised construction schedule which assures that construction will be initiated during the extension period and that construction will be continuous.

(3) Certification
The extension request must be signed by a responsible representative of the company proposing the project.

II. TECHNICAL REQUIREMENTS

(1) BACT Analysis
A BACT reanalysis is required in all permit extension requests, as in an application for a new PSD

permit. It should also be noted that, according to a recent EPA policy, any new BACT determination being prescribed for any regulated pollutant must also consider the impact of the proposed BACT on the emissions of unregulated or toxic pollutants.

(2) Additional PSD Review Requirement
A reanalysis of the PSD increment consumption and air quality impacts is required. Interim source growth in the area may have occurred and caused significant degradation of air quality. Therefore, the review agency is responsible for ensuring that the source requesting an extension would not cause or contribute to a PSD increment or NAAQS exceedances.

(3) New PSD Regulations or Requirements
It is not the intent of this policy to exempt projects from meeting new requirements. Therefore, all new or interim PSD requirements will be applied as in an application for a new PSD permit

III. PROCEDURAL ISSUES

(1) Duration of Extensions
Due to concerns of growth rights and public participation, EPA may limit an extension to 12 months, or less, from the initial date the permit was to expire. This allows for an extension, if necessary, while ensuring that impacted States, Districts and the public have control of their own air resources and growth rights and that state-of-the-art BACT will be employed.

(2) Public Comment
EPA will require the same public comment procedure for extension requests as for permit modifications including a 30-day public comment period. Requests for public hearings and petitions for permit appeals shall follow the applicable procedures of 40 CFR Part 124.

(3) Extensions of Later Units of Phased Multi-Unit Projects
Determinations for phased multi-unit projects are very complex involving the independence or dependence of a project and often different construction dates. Therefore, please consult with EPA regarding any questions addressing phased construction projects.

EPA Staff Contact:
Peter Fickenscher (415) 974-8226 (FTS 454-8226)
Section Chief:
Wayne Blackard (415) 974-8249 (FTS 454-8249)

EXHIBIT 8

177/77 File Copy: Ben Markin Owensboro R.O.

Thoroughbred Generating Company, LLC

701 Market Street, Suite 781
St. Louis, Missouri 63101

RECEIVED

JAN 27 2004

PERMIT REVIEW BRANCH
DIVISION FOR AIR QUALITY

RECEIVED

JAN 22 2004

DIRECTOR'S OFFICE
DIVISION FOR AIR QUALITY

January 21, 2004

John Lyons
Director
Kentucky Division of Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601

Dear Mr. Lyons,

The purpose of this letter is to update you on the probable date for the commencement of construction on the Thoroughbred Generating Station ("TGS"), located in Muhlenburg County, Kentucky. The construction and operation of TGS is in the public interest. TGS will incorporate state-of-the-art combinations of technology to control air emissions while providing direct benefits in the form of jobs and the annual infusion of tens of millions of dollars into the Kentucky economy. It will also provide low cost energy to the region, which is especially important in light of the recent call for low cost energy to promote job growth. The applicable statutes and regulations, as well as good science and other facts, all support the decision of the Kentucky's Natural Resources and Environmental Protection Cabinet (the "Cabinet) to issue the Title V/ Prevention of Significant Deterioration Permit (the "Permit") to the Thoroughbred Generating Company ("TGC") in October of 2002. Unfortunately, for reasons beyond our control, construction of TGS has been delayed. Therefore, pursuant to 401 KAR 51:017 Section 17 (2), this letter requests an extension to the eighteen-month time period following the issuance of the Permit by which TGC must commence construction on TGS.

As a way of background, TGC originally received a "proposed Title V/final PSD permit" on October 11, 2002. This Permit authorized TGC to construct and operate a 1500 megawatt coal-fired power generating station in Muhlenburg County, Kentucky. After the Permit was issued, the Cabinet received comments from the United States Environmental Protection Agency requesting two minor changes to the permit. As a result of these comments, two minor amendments were made and the Cabinet reissued the Permit with those changes on December 6, 2002. The letter accompanying the issuance of the Permit stated that "[t]his permit supersedes the proposed TV/final PSD permit issued on October 11, 2002 and shall become the final operation permit."

One of the general conditions included in the final Permit states that the construction and operating authority granted to TGC shall be invalidated "unless construction is commenced within eighteen (18) months after the permit is issued." Section G - General Provisions (d)3; *see also* 401 KAR 51:017, Section 17. While TGC is fully committed and capable of beginning construction within the required eighteen months from the date the permit was originally issued (i.e., by April 11, 2004),[1] it can do so only by exposing itself to extraordinary commercial risk and penalty for reasons beyond its control. Unfortunately, as you are aware, several private citizens and the Sierra Club filed a petition challenging the Cabinet's decision to issue the permit. Petitioners have raised some 200 "issues," without the benefit of factual or legal support, and despite the fact that DAQ, EPA and the Department of Interior concurred in the issuance of the Permit after extensive and detailed review. There is no doubt that, through the efforts of your staff, the Permit is lawful and fully supported by the facts. Nevertheless, until resolution of that Petition, we cannot complete the efficient, reliable and long-term commercial arrangements required to commence construction in the ordinary course of business. In the interim, TGC is left in the precarious position of having to expend significant resources to commence construction of TGS within the regulatory required period, without the benefit of those long-term arrangements.

To complicate matters, despite the efforts of TGC and DAQ's counsel, the hearing has moved at a glacial pace and has been extended. The hearing was originally set to run from July 28, to August 8, 2003. On April 4, 2003, the Petitioners successfully petitioned the Hearing Officer to continue the hearing until November 3, 2003 through November 14, 2003 and November 21, 2003. While the original time allotted for the hearing was two weeks, the hearing is now scheduled to run beyond June 2004, well over seven months since its commencement and twenty months after issuance of the permit. Furthermore, at the conclusion of the formal hearing, the parties will file post hearing briefs that undoubtedly will be extensive. Then, the Hearing Officer will have a minimum of thirty additional days to issue her report and recommendation. We realistically anticipate the Hearing Officer will take substantially longer than that 30 days. While TGC fully expects the Hearing Officer ultimately will agree with the

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[1] Conservatively, this eighteen month period began on October 12, 2002 but arguably that time period restarted when the Permit was reissued on December 6. For purposes of this letter, TGC is assuming the October date is controlling but we are willing to use the later start date if the Cabinet determines that is appropriate.

DAQ's determination that the Permit was issued in accordance with all applicable laws and regulations, the Secretary of the Cabinet must then review and affirm her recommendation.

In sum, TGC is caught in a position in which the Permit requires commencement of construction within eighteen months of permit issuance, yet the administrative review process does not allow resolution of the permit appeal within that timeframe. TGC has consistently promoted expeditious completion of the hearing and opposed the efforts of the Petitioners to extend the date of the final determination, but events beyond TGC's control have frustrated such attempts.

Considering the above-described circumstances, which are beyond TGC's control, we would respectfully request that TGC be granted an extension to the date that TGC must commence construction. Kentucky regulations allow for such an extension if the permittee shows that an extension is justified." 401 KAR 51:017, Section 17(2) (PSD Permits); 401 KAR 52:020, Section 3(2) (Title V Permits). The uncertainty of the ongoing litigation hinders commercial construction and financing arrangements and clearly satisfies these standards. Therefore, TGC requests that the time limitation for the commencement of construction be extended until the later of eighteen months or six months after the date when the last permit required for construction is final and not subject to appeal. This is an approach similar to that taken by other states in their permitting regulations. See e.g., 9 VAC 5-80-2180 allowing 9 months from the resolution of litigation to commence construction under a nonatttainment permit in Virginia.

TGC understands that obtaining this extension does not release it from the performance of any other conditions in the Permit. We simply seek this narrow extension to equitably compensate for events beyond our control. Please do not hesitate to contact me if you have any questions or concerns regarding this request. We look forward to your response.

Sincerely,

Dianna Tickner

Dianna Tickner
President

EXHIBIT 9

Thoroughbred Generating Company, LLC

701 Market Street, Suite 781
St. Louis, Missouri 63101
314-342-7613

July 27, 2005

RECEIVED

JUL 29 2005

PERMIT REVIEW BRANCH
DIVISION FOR AIR QUALITY

Mr. John Lyons
Director
Kentucky Division of Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601

Dear Mr. Lyons:

The purpose of this letter is to update you on the probable date for the commencement of construction on the Thoroughbred Generating Station ("TGS"), located in Muhlenburg County, Kentucky. The construction and operation of TGS is in the public interest. TGS will incorporate state-of-the-art combinations of technology to control air emissions while providing direct benefits in the form of jobs and the annual infusion of tens of millions of dollars into the Kentucky economy. It will also provide low cost energy to the region, which is especially important in light of the recent call for low cost energy to promote job growth. There is ample demand for this energy in Kentucky. In fact the City of Paducah recently signed on to purchase power from a similar plant in Illinois because Thoroughbred's permit was tied up by the permit challenge. The applicable statutes and regulations, as well as good science and other facts, all support the decision of the Kentucky's Natural Resources and Environmental Protection Cabinet (the "Cabinet") to issue the Title V/ Prevention of Significant Deterioration Permit (the "Permit") to the Thoroughbred Generating Company ("TGC") in October of 2002. On January 21, 2004, TGC requested an extension of that permit because delays resulting from the ongoing challenge to the permit made design and financing impossible. On January 26, 2004, the Division of Air Quality found that an extension was justified and granted an extension until October 9, 2005. Unfortunately, for reasons beyond our control, construction of TGS has been further delayed. Therefore, pursuant to 401 KAR 51:017 Section 17 (2), this letter also requests another extension to the eighteen month eighteen-month time period following the issuance of the Permit by which TGC must commence construction on TGS.

As a way of background, TGC originally received a "proposed Title V/final PSD permit" on October 11, 2002. This Permit authorized TGC to construct and operate a 1500 megawatt coal-fired power generating station in Muhlenburg County, Kentucky. After the Permit was issued, the Cabinet received comments from the United States Environmental Protection Agency requesting two minor changes to the permit. As a result of these comments, two minor amendments were made and the Cabinet reissued the final and complete version on December 6, 2002. The letter accompanying the issuance of the Permit stated that "[t]his permit supersedes the proposed TV/final PSD permit issued on October 11, 2002 and shall become the final operation permit."

One of the general conditions included in the final Permit states that the construction and operating authority granted to TGC shall be invalidated "unless construction is commenced within eighteen (18) months after the permit is issued." Section G - General Provisions (d)3; *see also* 401 KAR 51:017, Section 16 (2). Conservatively, this eighteen-month period began on October 12, 2002 but arguably that time period restarted when the Permit was reissued on December 6. For purposes of this letter, TGC is assuming the October date is controlling but we are willing to use the later start date if the Cabinet determines that is appropriate. While TGC was fully committed and capable of beginning construction within the required eighteen months from the date the permit was originally issued, it could do so only by exposing itself to extraordinary commercial risk and penalty for reasons beyond its control. Unfortunately, as you are aware, several private citizens and the Sierra Club filed a petition challenging the Cabinet's decision to issue the permit. Petitioners have, without the benefit of factual or legal support, and despite the fact that DAQ, EPA and the Department of Interior concurred in the issuance of the Permit after extensive and detailed review, raised some 200 "issues." There is no doubt that, through the efforts of your staff, the Permit is lawful and fully supported by the facts. Nevertheless, until resolution of that Petition, we cannot complete the efficient, reliable and long term commercial arrangements required to commence construction in the ordinary course of business. In the interim, TGC is left in the precarious position of having to expend significant resources to commence construction of TGS within the regulatory required period, without the benefit of those long term arrangements.

To complicate matters, despite the efforts of TGC and DAQ's counsel, the hearing moved at a glacial pace and was extended through June of 2004. The hearing was originally set to run from July 28, to August 14, 2003. On April 4, 2003, the Petitioners successfully petitioned the Hearing Officer to continue the hearing until November 3, 2003 through November 17, 2003. While the original time allotted for the hearing was two weeks, the hearing ran through June 2004, well over seven months since its commencement and twenty months after issuance of the permit. Furthermore, at the conclusion of the formal hearing, the Petitioners filed an initial brief of 116 pages and a reply brief over 700 pages over a month after it was originally due. The Hearing Officer has yet to issue her report and recommendation. While TGC fully expects the Hearing Officer ultimately will agree with the DAQ's determination that the Permit was issued in accordance with all applicable laws and regulations, the Secretary of the Cabinet must then review and affirm her recommendation. In sum, TGC is caught in a position in which the Permit requires commencement of construction within eighteen months of permit issuance, yet the administrative review process has not allowed resolution of the permit appeal within that timeframe or even twice the allotted time.

TGC has consistently promoted expeditious completion of the hearing and opposed the efforts of the Petitioners to extend the date of the final determination, but events beyond TGC's control have frustrated such attempts.

Considering the above-described circumstances, which are beyond TGC's control, we would respectfully request that TGC be granted a further extension of eighteen months, until April 9, 2007. Kentucky regulations allow for such an extension if the permittee "shows good cause", 401 KAR 52:020, Section 3(2) (Title V Permits), or makes a "satisfactory showing that an extension is justified." 401 KAR 51:017, Section 17(2) (PSD Permits). The uncertainty of the ongoing litigation hinders commercial construction and financing arrangements and clearly satisfies these standards.

TGC understands that obtaining this extension does not release it from the performance of any other conditions in the Permit. We simply seek this narrow extension to equitably compensate for events beyond our control. Please do not hesitate to contact me if you have any questions or concerns regarding this request. We look forward to your response.

Sincerely,

Dianna Tickner

Dianna Tickner
President

Natural Resources and
Environmental Protection Cabinet

Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601

FAX TRANSMISSION COVER SHEET

TO: Robert Ukeiley

Agency/Company: ______________ FAX#: ______________

From: Mary Hawkins

Number of pages *INCLUDING* this page:

Date: ______________

Phone: (502) 573-3382 FAX: (502) 573-3787

EXHIBIT 10

Thoroughbred Generating Company, LLC

701 Market Street, Suite 500
St. Louis, Missouri 63101
314-342-7613

December 4, 2006

Mr. John Lyons
Director
Kentucky Division of Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601

RECEIVED
DEC 5 2006
DIRECTOR'S OFFICE
DIVISION FOR AIR QUALITY

Dear Mr. Lyons:

The purpose of this letter is to update you on the probable date for the commencement of construction on the Thoroughbred Generating Station ("TGS"), located in Muhlenburg County, Kentucky. The construction and operation of TGS is in the public interest. TGS will incorporate state-of-the-art combinations of technology to control air emissions while providing direct benefits in the form of jobs and the annual infusion of tens of millions of dollars into the Kentucky economy. It will also provide low cost energy to the region, which is especially important in light of the recent call for low cost energy to promote job growth. There is ample demand for this energy in Kentucky. The applicable statutes and regulations, as well as good science and other facts, all support the April 11, 2006 decision of the Secretary of Environmental and Public Protection Cabinet to uphold the Kentucky's Natural Resources and Environmental Protection Cabinet (the "Cabinet") October 11, 2002 issuance of the Title V/ Prevention of Significant Deterioration Permit (the "Permit") to the Thoroughbred Generating Company ("TGC").

The background on the project is explained in my status update letter to you of July 27, 2005, which I have attached. While TGC was fully committed and capable of beginning construction within the required eighteen months from the date the permit was originally issued and the eighteen month extension, it can do so only by exposing itself to extraordinary commercial risk and penalty for reasons beyond its control. Unfortunately, as you are aware, several private citizens and the Sierra Club filed a petition challenging the Cabinet's decision to issue the permit. Petitioners have, without the benefit of factual or legal support, and despite the fact that DAQ, EPA and the Department of Interior concurred in the issuance of the Permit after extensive and detailed review, raised some 200 "issues" in the administrative appeal. TGC has consistently promoted expeditious completion of the hearing and opposed the efforts of the Petitioners to extend the date of the final determination, but events beyond TGC's control frustrated such attempts.

Even after the Secretary's reaffirmation of the Permit, Petitioners have challenged it again in Franklin Circuit Court. There is no doubt that, through the efforts of your staff, the Permit is lawful and fully supported by the facts. Nevertheless, until resolution of the case in Franklin Circuit Court, we cannot complete the efficient, reliable and long term commercial arrangements required to commence construction in the ordinary course of business. In the interim, TGC is left in the precarious position of having to expend significant resources to commence construction of TGS within the regulatory required period, without the benefit of those long term commercial arrangements.

Therefore, pursuant to 401 KAR 51:017 Section 17 (2), this letter also requests an additional extension, until October 11, 2007, of the time period following the issuance of the Permit by which TGC must commence construction on TGS. TGC recognizes that the five year term of the Title V Permit expires on October 11, 2007 and TGC remains committed to commencing construction by the extended date, at its own risk, if necessary. However, considering the above-described circumstances, which are beyond TGC's control, we would respectfully request that TGC be granted a further extension until October 11, 2007. Kentucky regulations allow for such an extension if the permittee "shows good cause", 401 KAR 52:020, Section 3(2) (Title V Permits), or makes a "satisfactory showing that an extension is justified." 401 KAR 51:017, Section 17(2) (PSD Permits). The uncertainty of the ongoing litigation hinders commercial construction and financing arrangements and clearly satisfies these standards. The matter in Franklin Circuit court is fully briefed and oral argument is scheduled for December 21, 2006. We are hopeful that a final decree can be issued in time to allow orderly financing and construction by October 11, 2007.

TGC understands that obtaining this extension does not release it from the performance of any other conditions in the Permit. We simply seek this narrow extension to equitably compensate for events beyond our control. Please do not hesitate to contact me at 314.342.7613 if you have any questions or concerns regarding this request. We look forward to your response.

Sincerely,

Dianna Tickner

Dianna Tickner
President

Cc: Kevin Finto
Carolyn Brown

EXHIBIT 11

Thoroughbred Generating Company, LLC

701 Market Street, Suite 300
St. Louis, Missouri 63101
314-342-7613

September 6, 2007

Mr. John Lyons
Director
Kentucky Division of Air Quality
Environmental and Public Protection Cabinet
803 Schenkel Lane
Frankfort, Kentucky 40601

RECEIVED
SEP 7 2007
DIRECTOR'S OFFICE
DIVISION FOR AIR QUALITY

Dear Mr. Lyons:

The purpose of this letter is to update you on the status of the Thoroughbred Generating Station ("TGS"), to be located in Muhlenburg County, Kentucky, and to request an extension of the current construction deadline applicable to this project. The Division for Air Quality authorized construction and operation of TGS by issuing a combined Title V / PSD Permit (No. V-02-001), on October 11, 2002. Pursuant to previous construction deadline extensions granted by the Division, the current deadline for the commencement of construction is September 30, 2007. The TGS Title V Permit is scheduled to expire on October 11, 2007. On April 4, 2007 Thoroughbred Generating Company ("TGC") timely applied for the renewal of the TGS Title V Permit. It is TGC's understanding that a draft Title V renewal permit is currently in development.

A more detailed background regarding the TGS project was explained in my status update letters to you dated July 27, 2005 and November 22, 2006. In short, while TGC has been fully committed and capable of beginning construction within construction deadlines, due to litigation, it would only be able to do so by exposing itself to extraordinary commercial risk and penalty for reasons beyond its control. As you are aware, following the issuance of the TGS Permit in 2002, several private citizens and organizations, including the Sierra Club, filed an administrative petition challenging the Cabinet's decision to issue the TGS Permit. On April 11, 2006, after nearly four years of intense and comprehensive proceedings, the Cabinet Secretary issued a detailed final order upholding the TGS Permit with limited revisions as lawful, proper and supported by the facts. Petitioners appealed that ruling to the Franklin Circuit Court. Most recently, on August 6, 2007, in a short, ten-page ruling containing scant citations to the record or to case law, the Franklin Circuit Court rejected the lengthy and sound reasoning of the Secretary and remanded the TGS Permit on certain grounds. The Cabinet and TGC have appealed that ruling to the Kentucky Court of Appeals. The Cabinet has requested that the appeal be heard on an expedited basis. TGC has filed a memorandum in support of that request.

TGC has consistently and unfailingly promoted expeditious and timely completion of the Petitioners' claims. However, notwithstanding this, the TGS Permit challenge remains unresolved. Until resolution of the litigation, TGC cannot complete the long term commercial and financial arrangements required to commence construction in the ordinary course of business. Until the litigation is resolved, TGC is left in the precarious position of having to expend significant resources to commence construction of TGS within the regulatory required period without the benefit of those long term arrangements.

Accordingly, and pursuant to 401 KAR 51:017 Section 17 (2), TGC requests an additional eighteen month extension, until March 30, 2009, by which time TGC must commence construction of TGS. Kentucky regulations allow for such an extension if the permittee "shows good cause", 401 KAR 52:020, Section 3(2) (Title V Permits), or makes a "satisfactory showing that an extension is justified." 401 KAR 51:017, Section 17(2) (PSD Permits). The uncertainty of the ongoing litigation is beyond TGC's control and hinders commercial construction and financing arrangements, thus clearly satisfying these standards.

The construction and operation of TGS is in the public interest. TGS will provide low cost energy to the region, provide jobs and otherwise promote job growth, and provide the annual infusion of tens of millions of dollars into the Kentucky economy, all while incorporating state-of-the-art combinations of technology to control air emissions. There is ample demand for this energy in Kentucky. TGC understands that obtaining this extension does not release it from the performance of any other conditions in the TGS Permit.

Please do not hesitate to contact me at 314.342.7613 if you have any questions or concerns regarding this request. We look forward to your response.

Sincerely,

Dianna Tickner

Dianna Tickner
President

Cc: Kevin Finto, Esq.
Carolyn Brown, Esq.

EXHIBIT 12

EXHIBIT 22

Peabody

PEABODY ENERGY

File

Peabody Energy
1100 State Route 175 South
P.O. Box 148
Graham, Kentucky 42344
270-338-5701
Fax 270-338-5355

July 25, 2002

Mr. John S. Lyons
Director
Kentucky Division of Air Quality
803 Schenkel Lane
Frankfort, KY 40601

Dear Mr. Lyons:

As you requested enclosed is the preliminary summary of the modeling results based on the constant year round emissions of 0.41 lbs SO2/mmbtu. As you know, this is a conservative assumption since the draft permit for Thoroughbred also requires a 0.167lb.SO2/mmbtu limit of 30 day rolling average. We note that the model results show that for 1992 meteorological data no impacts greater than 10% would occur. The highest impact ranges from 7.22% to 8.66% using various assumptions about ammonia as described in the footnotes to Table 2. Using meteorological data for 1990 and 1996, one day in each year showed modeled impacts greater than 10%.

We are still reviewing the post processor information to verify QA/QC and to evaluate the conditions under which the greatest impacts occur. We will forward that information to you as soon as it is available.

Should you or your staff have questions regarding this analysis you can reach me at 314-342-7613 of Bryan Handy at 502-893-4510.

Sincerely,

Dianna Tickner

Dianna Tickner

EXHIBIT
TCC 175

SUMMARY OF SHORT-TERM LIMIT RUN
Thoroughbred Project

Short-term limit rest with TGS 0.41 SO_2 lbs/MMBTU 24h. H_2SO_4 is not scaled like SO_2 is from the original run TGS 0.167 SO_2 lbs/MMBTU 24h.

Table 1. Stacks parameters and pollutant emissions.

	UTM-X Zone 17	UTM-Y Zone 17	Stack Height (m)	Base Elevation (m)	Stack Diameter (m)	Exit Velocity (m/s)	Exit Temperature (K)	SO_2 (lb/hr)	SO_4 (lb/hr)	NO_X (lb/hr)	PM_{10} (lb/hr)
Stack 1	492.069	4129.546	198.12	134.0	7.92	21.24	327.04	3054.3	37	595.965	134.09
Stack 2	492.076	4129.551	198.12	134.0	7.92	21.24	327.04	3054.3	37	595.965	134.09

Table 2. Results for Class I area (highest concentration) – includes the use of 8 sub-groups for PM_{10}, 0.41 SO_2 lbs/MMBTU and original (not scaled) SO_4 emission rates.

Pollutant	Averaging Period	SIL ($\mu g/m^3$)	Year 1990 ($\mu g/m^3$)	Year 1992 ($\mu g/m^3$)	Year 1996 ($\mu g/m^3$)
SO_2	3-hours	1.0	0.9	1.1	1.2
	24-hours	0.2	2.6	5.8	4.9
	Annual	0.1	0.2	0.2	0.2
NO_x	Annual	0.1	0.025	0.026	0.027
PM_{10}	24-hours	0.3	0.12	0.22	0.16
	Annual	0.2	0.009	0.009	0.008
Visibility 1**	24-hours	5%	13.75% (4, 1)	8.66% (10, 0)	16.04% (7, 1)
Visibility 2**	24-hours	5%	12.24% (4, 1)	7.73% (10, 0)	15.85% (7, 1)
Visibility 3**	24-hours	5%	12.06% (2, 1)	7.22% (9, 0)	15.91% (7, 1)

*(Number of days > 5%, number of days > 10% ΔBext.)

**Visibility 1: CALPOST is applied directly on CALPUFF run output.

Visibility 2: 58 sources are used as background + NH3 = 0.5ppb + NH3 emitted from TGS.

Visibility 3: CASTNET site used as background + NH3 emitted from TGS.

Table 3. Cumulative PSD runs – Highest (H) and second highest (H2H) concentrations for 3 hours and 24 hours averages- Includes the use of 8 sub-groups for PM_{10}, 0.41 SO_2 lbs/MMBTU and original (not scaled) SO_4 emission rates.

Pollutant	Averaging Period	Increment ($\mu g/m^3$)	Year 1990 ($\mu g/m^3$)	Year 1992 ($\mu g/m^3$)	Year 1996 ($\mu g/m^3$)
SO_2	(H) 3-hours		11.31	11.53	12.16
	(H2H) 3-hours	25.0	10.16	11.05	11.40
	(H) 24-hours		3.54	5.85	5.31
	(H2H) 24-hours	5.0	3.06	4.98	3.78
	Annual	2.0	0.4	0.4	0.4

EXHIBIT 13

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DATE: November 26, 1980

SUBJECT: Request for Extension on PSD Permit for Indianapolis Power and Light Company

FROM: Walter C. Barber, Director
Office of Air Quality Planning and Standards

TO: Sandra S. Gardebring, Director
Enforcement Division, Region V

This is in response to your August 6, 1980 memorandum to Ed Reich concerning the request by the Indianapolis Power and Light (IPL) Company for a two year extension on the commencement date for the construction of Unit 1 of IPL's Patriot Generating Station. IPL was granted a PSD permit for three units on December 14, 1979, and under our current regulations the company has until June 1981 to commence construction on the first unit. According to your memo, the scheduled dates for commencing construction on Units 2 and 3 are April 1983 and April 1985, respectively. The company bases its request on their evaluation of reduced consumer demand for electricity in the generating area, which leads to the issue involved in this case -- Is decreased consumer demand for a company's output justifiable cause for extending commencement dates in a PSD permit?

This is a sensitive issue, especially since the existing regulatory language does not provide explicit guidance regarding how such requests would be treated, or what constitutes sufficient justification for an extension. Since receiving your memo, discussions on this subject have been held involving my staff, the Office of General Counsel, the Division of Stationary Source Enforcement, and Louise Gross of your staff. During this time, similar cases have been brought to light in other Regions, especially one in Region VI wherein a fiber glass manufacturing plant has made a similar request for a similar reason.

We are continuing to evaluate the broader implications of this issue, and the most appropriate approach for long-term resolution. However, although definitive Agency policy is still under development, I recommend that we propose to approve the pending requests. I also recommend that the following specific steps be taken in proposing to approve the IPL request.

First, your staff should assure that the company's projections of reduced consumer demand are free of obvious errors and that other independent data (if available) confirm the company's projections as accurate or reasonable. Also, the company must fully intend to proceed with the complete project on the extended schedule. In this regard, note that there are no provisions for granting extensions on the commencement dates for Units 2 and 3 beyond the built-in cushion of 18 months that is available under the current regulations.

Second, I strongly urge you to coordinate with the State of Indiana on this issue and get their concurrence to grant an extension to Indianapolis Power and Light; I do no recommend that you propose approval if the State objects.

Third, a Federal Register notice should be prepared proposing to grant the company's request and soliciting comments from the public (State of Indiana also), including public hearings if requested. This will put the State's position on the public record.

Fourth, the Federal Register notice should note that currently there are no provisions for extending the dates on Units 2 and 3.

We are continuing to assess the broader question of the criteria for approving requests for extension of PSD construction schedules. It is likely that we will be receiving many of these requests in the future, and therefore, an Agency policy in this regard appears necessary. I anticipate that we will be able to publish (or at least propose) a general policy in the Federal Register before you take final action the IPL extension request.

cc: Dick Wilson
Dave Hawkins
Mike James
Director, Air & Hazardous Materials Division, Regions I-X
Director, Enforcement Division, Regions I-IV, VI-X

EXHIBIT 14

June 10, 2002

Mr. Hector M. Alejandro
Director for Planning and Environmental Protection
Puerto Rico Electric and Power Authority (PREPA)
P. O. Box 364267
San Juan, Puerto Rico 00936-4267

Re: PREPA San Juan Repowering Project

Dear Mr. Alejandro:

The U.S. Environmental Protection Agency's (EPA) Region 2 Office received PREPA's March 27, 2002 letter regarding the San Juan Repowering Project. In your letter, you reference two possible alternatives regarding the future of the San Juan project including: (1) an extension of the 18 month period to construct the project in the existing Prevention of Significant Deterioration (PSD) permit; and (2) installation of a combustion turbine different from the one permitted. As discussed in detail below, if PREPA exercises the first option, it will need to submit a justification for the 18 month extension that complies with certain procedural requirements. Note that a separate request will also need to be submitted to Puerto Rico Environmental Quality Board (EQB) to extend the EQB permit. If PREPA chooses to install different turbines, no extension can be granted for the current permit and you must submit a new permit application and obtain a new PSD permit.

Background:

PREPA applied for a PSD permit for the repowering project in October, 1996. In this permit application, PREPA claimed netting credits for the 1996 retirement of Units 5 and 6, and thereby netted out of review for nitrogen oxide, sulfur dioxide and particulate matter. A final PSD permit was issued in March, 2000 for VOCs and CO. PREPA appealed this final permit and EPA subsequently issued a revised final permit in November, 2000.

Discussion:

Pursuant to the federal PSD regulations at 40 CFR 52.21(r)(2), a PSD permit approval becomes invalid if construction is not commenced within 18 months after receipt of such approval. However, EPA may excercise its discretion to extend the 18 month period "upon a satisfactory showing that an extension is justified." Although PREPA has provided reasons for seeking an extension, it must also demonstrate that there is a reasonable likelihood that the project will go forward and construction will commence in the next 18 months. In addition, PREPA must provide the following information before EPA can grant an extension:

(1) BACT Review -

The permit extension application should reevaluate BACT for VOC and CO to determine if it remains appropriate. If no advancement in control technology has occurred, based on reference to the BACT/LAER clearinghouse and other sources, the original BACT determination would still apply.

(2) Air Quality Review -

The permit extension application should determine whether the increment analysis and air quality analyses remain the same.

(3) Additional PSD Requirements -

PREPA must address any new requirements that might now apply due to the passage of time since the final permit issuance. The permit extension application should therefore include a new BACT and air quality analysis for sulfur dioxide, nitrogen oxide, and particulate matter because the original nonapplicability determination for those pollutants is no longer valid. Further, a revised Environmental Justice analyses reflecting impacts due to additional pollutants and any changes to the impacts of pollutants reviewed earlier will be required. The rationale for this determination is explained below.

Rationale why the emission reductions are no longer contemporaneous/creditable:
Under the federal PSD regulations at 40 CFR 52.21(b)(3)(ii), an increase or decrease in actual emissions is contemporaneous (and therefore creditable) with the increase from the particular change only if it occurs between (a) the date five years before construction on the particular change commences; and (b) the date that the increase from the particular change occurs. PREPA decreased actual emissions by retiring Units 5 and 6 by September 1996 and December 1996, respectively but did not commence construction of the new combustion turbines by December, 2001 and indeed has still not commenced construction.

The regulations at 40 CFR 52.21(b)(9) defines the term "commenced construction." Construction commences when the owner/operator has obtained all necessary preconstruction approvals or permits and either has; (i) begun, or caused to begin, a continuous program of actual construction of the source, to be completed within a reasonable time; or (ii) entered into binding agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time. PREPA received all necessary preconstruction approval or permits by October, 2001. However, at that time, PREPA neither began actual construction nor had entered into any binding agreement or contractual obligation to undertake actual construction. PREPA's contract for construction had been cancelled 17 months earlier, in May 2000. Thus, PREPA did not meet the "commence construction" test and thereby failed to meet the 5-year contemporaneous period requirement to qualify for netting credits. EPA has no authority to extend this five year period. Thus, in order to obtain an 18 month extension , PREPA must review both the pollutants affected in the original PSD permit as well as the additional pollutants.

(4) Public Comment/Duration of Extension-

Once PREPA has satisfied all of the procedural requirements for an extension, EPA will notice the extension for public comment. Note that if an extension is granted, the permit will expire no later than November 30, 2003.

In the event that PREPA chooses to redefine the project with a different combustion turbine, it should submit a new PSD permit application. The existing PSD permit is defined by the project set forth in the original permit application. The permit was issued, subject to public review, based upon the specific project identified. The BACT and air quality analyses were conducted on that basis. A new project would necessitate a new permit application. This letter is not a final agency action on the part of EPA. Rather, it is intended to assist PREPA in determining how to proceed in light of the two options identified in your March 27, 2002, letter. If you have any questions about this determination, please call Umesh Dholakia at (212) 637-4023.

Sincerely yours,

Steven C. Riva, Chief
Permitting Section

cc: Angel Berrios, PREQB

EXHIBIT 15

ENB - REGION 4 NOTICES

Completed Applications
Consolidated SPDES Renewals

Notice To Extend Final

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PREVENTION OF SIGNIFICANT DETERIORATION PERMIT

Applicant: Besicorp-Empire Newsprint and Besicorp-Empire Power Company
36 Riverside Avenue
Rensselaer, NY 12144

DEC Permit ID: 4-3814-00061/00001 and 4-3814-00052-00001

Project Description and Location: Besicorp-Empire Company, LLC obtaining a Prevention of Significant Deterioration (PSD) pre-construction permit from the New York State Department of Environmental Conservation (DEC) on September 24, 2004 pursuant to the federal requirements at 40 Code of Federal Regulations (CFR) § 52.21. The permit allowed the construction and operation of a facility consisting of a newsprint recycling plant and a nominal 505 MW combined cycle power production plant. The recycling plant will process approximately 430,000 tons/year of waste newspaper and magazines and have a auxiliary boiler to supply steam using natural gas and a limited quantity of low sulfur fuel oil. The power plant is configured with two GE Frame 7FA combustion turbines, heat recovery steam generators (HRSGs) and a steam turbine. With all of these components the maximum electrical output of the facility will be approximately 670 MW. It will use natural gas as the primary fuel and low sulfur (0.5%) distillate as the backup fuel in the combustion turbines and duct burners within the HRSGs.

The project is located at the former industrial manufacturing site currently owned by BASF in the City of Rensselaer, Rensselaer County. The project site totals 88 acres, with all facilities associated with the project covering 58 acres. The site is bordered by Riverside Avenue and the Hudson River on the west, the Port Access Highway on the east and south, and by another industrial facility on the north.

Prior Public Notices and Permit Status: The Department of Environmental Conservation ("DEC" or "the Department") published a Notice of Intent to Issue Prevention of Significant Deterioration Permit Conditions in the May 29, 2002 edition of the Environmental Notice Bulletin and in local newspapers. The notice stated that DEC had made a tentative determination that the proposed construction and operation of the combined Besicorp newsprint recycling and power generation facility was subject to and satisfied federal requirements for PSD contained in 40 §52.21 and §124. The public comment period was open through

July 19, 2002. The Department responded to public comment on the PSD notice and made a determination to issue a final PSD permit. The final permit became effective September 24, 2004.

The Department determined that the project will control emissions of PSD-affected air pollutants with the Best Available Control Technology (BACT) for the following PSD-affected air pollutants: sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM & PM_{10}), Carbon Monoxide (CO), and sulfuric acid mist (H_2SO_4). The DEC staff verified that emissions of these PSD-affected air pollutants will not cause or significantly contribute to an exceedance of any national primary or secondary ambient air quality standards, and consume less than the allowable PSD air quality increments.

Subsequently, at Besicorp's request, DEC separated the PSD and State Facility permits for the newsprint recycling and power production facilities in June, 2005 based on financing requirements for the two projects. However, each of the separated PSD permits retained all of the applicable requirements and recognized that the plants were formerly permitted under a single facility for PSD purposes. Furthermore, based on reductions in volatile organic compound (VOC) emissions at the newsprint recycling facility and the relocation of the auxiliary boiler (with a smaller size) at the power plant to the newsprint facility, DEC issued revised State Facility permits in December, 2005 along with a PSD permit for the recycling plant reflecting these changes. Besicorp's consultants had demonstrated to DEC's satisfaction that none of the control technology or air quality impact analysis reviews were negatively effected by these changes.

Purpose of Current Notice: Pursuant to 40 CFR 52.21(r)(2) and condition F.5 of the initial PSD permit for the combined facilities, the permit granted to Besicorp-Empire, LLC would become invalid after 18 months of the final determination if the project has not commenced construction or is not granted an extension of the permit prior to March, 23, 2006. Besicorp-Empire Newsprint (BEN) and Besicorp-Empire Power Company (BEPC) submitted, through their consultant Epsilon Associates, requests to NYSDEC on January 10, 2006 for an 18 month extension of the two facilities' PSD permits. Further information in support of the extension requests were submitted by the companies on January 27, 2006 to address a NYSDEC staff information request. This information provided more details on ongoing discussion with financial institutions, a construction schedule and the status of the remediation activities at the site. Additional details were further provided on February 24, 2006 in response to a request from EPA Region II of February 17, 2006 on pending permits and their association with the construction schedule.

Based on the information provided by BEN and BEPC, DEC staff, in consultation with EPA Region II staff, have made a tentative determination that an extension of the PSD permits for the two facilities is justified in accord with 40 CFR 52.21(r)(2). To assure that the PSD permit will remain in force while financial negotiations are finalized and the Army Corp of Engineers and NYS Office of General Services permits are granted, DEC staff have made a tentative decision to grant the PSD permit extension. However, the extension of the PSD permit will be limited to one year (i.e. till March 23, 2007) instead of the requested 18 months. Until a final decision is made by NYSDEC on this extension request the, current PSD permits for the two facilities shall remain valid and in force.

Tentative DEC Staff Determination: DEC staff, in consultation with EPA Region II staff, have reviewed the information submitted by Besicorp-Empire Newsprint and Besicorp-Empire Power Company to support it's request for an extension. Staff's tentative approval to grant the extension is based, in part, on a review of the following factors provided in EPA policy guidance: 1) BACT Review: An extension is justified if the Best Available Control Technology (BACT) determination(s) for the facility covered by the PSD permit remains appropriate. The previous BACT determination for the two facilities' particulate/PM_{10}, NO_x, SO_2, CO, and sulfuric acid emissions were acceptable at the time of the original permit and have not changed with the revised auxiliary boiler at the Newsprint facility. The Department concurs with Epsilon Associates conclusion that a review of the EPA BACT/LAER Clearinghouse reveals that the BACT determination remains current for the turbines at the power plant. 2) Air Quality Assessment: The modifications to the configuration and emissions of the separated facilities were modeled by the Epsilon Associated in June, 2005 to demonstrate that the resultant impacts were still within the applicable standards and PSD increments. DEC staff reviewed that analysis and found it acceptable. No significant change in controlling impacts were identified compared to the original analysis. 3) Additional PSD Requirements: As provided in EPA guidance, any new applicable requirement which has been promulgated since the original PSD permit date must be reviewed to assure compliance by the facility. Two such requirements which have occurred are the EPA's policy of April 5, 2005 on implementing the $PM_{2.5}$ standards and a revision of the PSD regulations on November 29, 2005 to treat NO_x as a ozone precursor in attainment areas. With respect to the implementation of the $PM_{2.5}$ standards, EPA policy continued reliance on the demonstration of PM_{10} standards in attainment areas until the final implementation rule is promulgated. However, based on DEC policy CP-33, a detailed assessment of $PM_{2.5}$ impacts were previously performed and found acceptable. With respect to NO_x emissions for ozone PSD purposes, it is noted that the facility's original permit was reviewed under the more restrictive non-attainment provisions in 6 NYCRR Subpart 231-2 whereby the limits on NO_x were defined by LAER requirements and NO_x emission offsets were obtained for ozone purposes. Thus, no further analysis is deemed necessary.

Public Comments: DEC invites public comment regarding this tentative determination. DEC's final determination will be made only after full consideration of all public comment. Statements are to be limited to the specific issue of the PSD permit extension and must be in writing, must be accompanied with adequate supporting information, and must be received by the Department at the below address no later than April 24, 2006.

Department Contact: Comments or requests for file documents or other information should be sent to:

Kevin Kispert, Project Manager
Division of Environmental Permits
New York State Department of Environmental Conservation
625 Broadway, Albany, NY 12233-1750
518/402-9161

Comment Period

Comment Period for Five Rivers UMP Scoping Open Through March 28th, 2006

The New York State Department of Environmental Conservation welcomes public comments on the scope of the unit management plan for the Five Rivers Environmental Education Center. The principal goals of the Draft Plan are to study new capital initiatives at the Center, and to articulate a shared vision for the long term management and operation of the popular facility.

The purposes of the comment period are to provide ample opportunity for citizen participation at the earliest stage of the planning process, and to ensure that the Draft Plan addresses issues relevant to the public and faithfully reflects community needs and interests. Those wishing to contribute to the planning discussion may submit written comments to Five Rivers Center, 56 Game Farm Road, Delmar, NY 12054 through close of business, Tuesday, March 28.

Publication of the proposed Draft Plan is targeted for September 2006. Those wishing to receive the list of suggested discussion topics or to request "interested party" status for the unit management plan initiative are urged to contact the Center at 475-0291 to get on the mailing list.

Negative Declaration

Greene County - The Town Board of the Town of Catskill, as lead agency, has determined that the proposed contract for sale of former Washington Irving School will not have a significant adverse environmental impact. The action involves the town of Catskill proposing entering a contract for sale of the 17,500 ft former

Washington Iring School building and approximately 1.04 acres of land. The property is located in a designated historic district in the Village of Catskill.

Contact: Joseph Izzo, Town of Catskill, 41 Main Street, Catskill, NY 12414, phone: (518) 943-2141.

Positive Declaration

Albany County - The City of Albany Common Council, as lead agency, has determined that the proposed Park South Urban Renewal Plan may have a significant adverse impact on the environment and a Draft Environmental Impact Statement must be prepared. The action involves the Park South Urban Renewal Plan, if adopted, proposes to consist, in part, of a plan to assemble available properties to allow the potential redevelopment of: 1) approximately 28 one and two family units and 225 multi-family units with 541 units of new housing, including 50 senior units [a net increase of 253 units] which will consist of row houses, market rate apartments or condominium units; 2) ±22,500 square feet of existing retail space with ±44,500 square feet of retail space [a net increase of 22,000 square feet of retail space]; 3) ±31,000 square feet of office space with ±100,000 square feet of office space in two buildings associated with Albany Medical Center [a net increase of ±69,000 square feet]; 4) in-fill housing [up to 53 one, two or multi-family units]; 5) blocks of housing or rehabilitate isolated buildings up to 111 units of rehabilitated housing and 2,250 square feet of retail space; 6) lands for parking facilities, including enclosed parking garages, decks, surface parking lots and other parking areas to support the redeveloped uses; and 7) other ancillary infrastructure improvements to streets, sidewalks, sewer and water facilities and streetscapes. The Park South Urban Renewal Area consists of all properties within ±26.5 acres of land generally bounded by Madison Avenue on the north, Robin Street on the west, Myrtle Avenue on the south and Lark Street on the east; including interior streets within the aforementioned boundary, New Scotland Avenue, Knox Street, Dana Avenue and Morris Street.

Contact: Douglas Melnick, Department of Development & Planning, 21 Lodge Street, Albany, NY 12207, phone: (518) 434-2532 ext. 15.

Positive Declaration And Notice Of Acceptance Of Draft Generic EIS And Public Hearing

Rensselaer County - The Sand Lake Town Board, as lead agency, has determined that the proposed Sand Lake Comprehensive Plan may have a significant adverse impact on the environment and a Draft Generic Environmental

Impact Statement has been prepared. A public hearing on the Draft Generic EIS will be held on **April 12, 2006 at 7:30 p.m.** at the Sand Lake Town Hall, Sand Lake, NY. The action involves an update to the Town's Comprehensive Plan, which is a Type I action. This plan sets forth policy recommendations pertaining to Future Land Use; Hamlet Centers; Rural Character, Open Space, and the Environment; Economic, Housing, and Community Sustainability; and Infrastructure and Community Services within the Town. It sets forth a vision, specific goals, objectives, and recommendations, a general future land use map, and a plan for implementation.

Contact: Chris Kronau, Town of Sand Lake, PO BOX 273, Sand Lake, NY 12153, phone: (518)674-2026, fax: (518) 674-0441, e-mail: clerk@sand-lake.us.