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October 7, 2011

BY ELECTRONIC MAIL & CERTIFIED MAIL,
RETURN RECEIPT REQUESTED

Ms. Lisa P. Jackson
Administrator
Mail Code 1101A
U. S. Environmental Protection Agency
Ariel Rios Building, Room 3000
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Derek R. McDonald
TEL +1 512.322.2667
FAX +1 512.322.8342
derek.mcdonald@bakerbotts.com

Re: Docket No. EPA-HQ-OAR-2009-0491; CPS Energy's Petition for
Reconsideration of The Cross-State Air Pollution Rule

Dear Administrator Jackson:

Attached please find *CPS Energy's Petition for Reconsideration of The Cross-State Air Pollution Rule*, Docket No. EPA-HQ-OAR-2009-0491.

Thank you for your assistance.

Sincerely,



Derek R. McDonald

Enclosure

cc: *(Via Electronic Mail & Certified Mail, Return Receipt Requested)*

Ms. Meg Victor
Clean Air Markets Division
Office of Atmospheric Programs
Mail Code 6204J
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Ms. Sonja Rodman
U.S. EPA Office of General Counsel
Mail Code 2344A
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

October 7, 2011

Lisa P. Jackson
Office of the Administrator
Mail Code 1101A
U.S. Environmental Protection Agency
Ariel Rios Building, Room 3000
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

CC: Meg Victor
Clean Air Markets Division
Office of Atmospheric Programs
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**CPS ENERGY'S
PETITION FOR RECONSIDERATION OF
THE CROSS-STATE AIR POLLUTION RULE**

Docket No. EPA-HQ-OAR-2009-0491

CPS Energy respectfully submits this Petition for Reconsideration of the Cross-State Air Pollution Rule ("CSAPR"), 76 Fed. Reg. 48,208 (Aug. 8, 2011). CPS Energy's request for reconsideration is a narrow one, limited to a request for reconsideration of the sulfur dioxide ("SO₂") and nitrogen oxides ("NO_x") allowances granted to CPS Energy's newest generation unit, the J.K. Spruce Unit 2 ("Spruce 2"). The allowances granted to the Spruce 2 Unit under the CSAPR Federal Implementation Plan ("FIP") are not based on representative operating data for the unit, which only became operational in November 2009 and was not operated at full capacity in 2010. Accordingly, CPS Energy requests that EPA reconsider and correct the allowance allocations granted to Spruce 2 to levels that are reflective of representative operations.¹

¹ On October 6, 2011, EPA released a pre-publication copy of proposed revisions to CSAPR. See U.S. EPA Proposed Rule, Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter

A. CPS Energy

CPS Energy is the nation's largest municipally owned energy utility providing both natural gas and electric service. Acquired by the City of San Antonio, Texas in 1942, the company serves 717,000 electric customers and 325,000 natural gas customers within a 1,514-square-mile service area in and around San Antonio, the seventh-largest city in the nation. Thanks to a diverse mix of fuels, electricity provided by CPS Energy is affordable, reliable and environmentally sound. Affordability is important to CPS Energy and its customers. The CPS Energy service area is a fast growing population center with a minority population of greater than 60 percent and a large percentage of the citizens living below the poverty level. The allocations to CPS Energy under CSAPR threaten full utilization of our generation mix for the benefit of San Antonio's residents. Today, coal comprises 32 percent of our generation capacity, with nuclear energy at 16 percent. Renewable energy, including wind, solar and landfill-generated methane gas, account for 13 percent, while natural gas comprises the remaining 39 percent of our generation capacity. Since 2000, CPS Energy has reduced SO₂ and NO_x emissions by approximately 2,500 tpy and 8,000 tpy, respectfully, and reduced dispatch of our fossil-fuel generation is the only available mechanism that CPS Energy has been able to identify to make further reductions in these emissions within the required time frames in CSAPR.

B. Reconsideration of CSAPR's Application to Texas Sources Is Appropriate, and CPS Energy Seeks Reconsideration of the Allocations Granted to the New J.K. Spruce Unit 2

Section 307(d)(7)(B) of the federal Clean Air Act ("CAA") provides for EPA reconsideration of a CAA rule upon objection by a petitioner. 42 U.S.C. § 7607(d)(7)(B). Reconsideration is appropriate when the objection raised by the petitioner was impracticable to raise during the public comment period or the grounds for the objection arise after the public comment period, if the objections are of central relevance to the outcome of the rule. *See id.* EPA is authorized to stay the effectiveness of rules promulgated under the CAA for up to three months during reconsideration. *See id.*

CPS Energy recognizes that a number of other petitioners, including the State of Texas, have petitioned EPA for reconsideration of CSAPR as it applies to Texas. CPS Energy shares many of the concerns about CSAPR's application to Texas and the short implementation schedule as identified in the State's petition and others.² In particular, CPS Energy believes that the omission of Texas from CSAPR as it was proposed in August 2010 left affected sources in Texas without adequate notice of what has now become a substantial regulatory obligation that provides only weeks to prepare for compliance. Despite CPS Energy's immediate efforts to reduce SO₂ emissions by switching to ultra-low sulfur coal at its J.T. Deely plants, CPS Energy

and Ozone (pre-publication, Oct. 6, 2011). If finalized by EPA, the proposed revisions would result in an increase to Texas's state-wide SO₂ emissions budget, with corresponding revisions to the state's assurance levels and new unit set-asides. While the proposed revisions would affect some units operated by CPS Energy, EPA has not proposed to adjust Spruce 2's allowance allocations with the proposed revisions. Thus, the October 6, 2011 proposed revisions do not obviate the need for reconsideration to correct Spruce 2's allowance allocations.

² *See* Petition of the State of Texas for Reconsideration and Stay, Docket No. EPA-HQ-OAR-2009-0491 (filed Sept. 8, 2011).

was left with a projected deficit of over 3,000 SO₂ allowances under CSAPR for 2012 with no options other than to limit dispatch of our fossil-fuel generation to reduce emissions in just a period of weeks to meet these requirements. CPS Energy acknowledges EPA's announcement on October 6, 2011, to propose revisions to CSAPR that would increase Texas's state-wide SO₂ emissions budget, including an increase to certain of CPS Energy's units. While this proposal, if finalized, would significantly reduce the financial impact to CPS Energy's customers from the SO₂ shortfall, it does not obviate the need to correct the Spruce 2 allowance allocations as described in this Petition.

Given the substantial deficit in SO₂ allowances and extremely limited time for efforts toward compliance, CPS Energy urges EPA to reconsider CSAPR and provide CPS Energy and other similarly-situated publicly-owned municipal utilities their fair and equitable portion of any additional allowances granted to Texas. However, this Petition is directed primarily at the emissions allowance allocations granted to Spruce 2 under the CSAPR FIP. CPS Energy is forced to raise its concerns about the allowance allocations granted to Spruce 2 only now, after the final issuance of CSAPR, because it was not afforded the opportunity to review and comment on proposed annual allocations for the generating units in its portfolio before the rule was issued. EPA did not propose annual allocations for Texas sources with its January 7, 2011 Notice of Data Availability ("NODA"), where the Agency proposed allocations for sources in other states. *See* 76 Fed. Reg. 1109 (Jan. 7, 2011). Further, Spruce 2 was not even listed in the allocations spreadsheet that accompanied the January 7, 2011 NODA.³ Thus, correction of Spruce 2's allocations is appropriate on reconsideration.

C. Allocations Granted to Spruce 2 Are Not Based on Representative Operations

Spruce 2 is the newest coal-fired generation unit in the CPS Energy fleet. It is equipped with state-of-the-art emissions control technologies, and the unit's SO₂ and NO_x emissions rates are at or near the lowest in the state among coal-fired generation units. Based on EPA data for the year 2010, Spruce 2 ranked as the number one coal unit in the nation for a combined SO₂ and NO_x rate on a pounds-per-mmbTU basis. After roughly 50 months of construction, start-up of Spruce 2 occurred in November 2009, just before the January 1, 2010 date that separates "existing units" from "new units" under the CSAPR FIP. *See* 76 Fed. Reg. at 48,290. While Spruce 2 "commenced commercial operation" for purposes of the federal Acid Rain Program on November 22, 2009, by placing electricity onto the grid for the first time, *see* Attachment A, Spruce 2 was not considered to be commercially available by the Electric Reliability Council of Texas ("ERCOT") until May 28, 2010, the day after CPS Energy provisionally accepted the unit from the construction contractor. *See* Attachment B.

Even following its commercial availability to ERCOT on May 28, 2010, Spruce 2 was not available to be operated at full capacity during 2010 due to additional work associated with the full commissioning of the new unit. CPS Energy first reported emissions data from Spruce 2 to the Clean Air Markets Database ("CAMD") in April 2010, following certification of the unit's CEMS. CPS Energy did not report any emissions data to the CAMD during the months of January, February, and March 2010, before the CEMS was certified. The table below lists the

³ In that spreadsheet, EPA listed covered Texas sources and proposed ozone-season NO_x allocations, but not annual SO₂ and NO_x allocations. However, Spruce 2 was not listed in the spreadsheet.

month-by-month utilization of Spruce 2 in the months after the Spruce 2 CEMS was certified. Spruce 2 was idled during the months of September, October, and November 2010 for a repair of the main transformer. In total, Spruce 2 ran at only 52.7 percent capacity between April and December 2010, the months after which CPS Energy began submitting quality-assured emissions data for Spruce 2 to the CAMD.

CPS Energy Spruce 2 Capacity Factors in 2010

2010	Gross MWh	Gross Capacity Factor	CEMS Heat Input (mmbtu)
Apr	447,119	76.20	1,217,980
May	284,218	46.87	3,102,038
Jun	572,286	97.53	6,146,264
Jul	580,148	95.68	6,216,084
Aug	583,857	96.29	6,267,765
Sep	47,794	8.14	509,678
Oct	0	0.00	0
Nov	0	0.00	0
Dec	319,357	52.67	3,524,902
Year	2,834,779	52.70	26,984,711

Under the CSAPR FIP, Spruce 2 was classified as an existing unit and granted 158 annual SO₂ allowances, 560 annual NO_x allowances, and 455 ozone-season NO_x allowances. *See* “Final CSAPR Unit Level Allocations Under the FIP” (July 18, 2011) *available at* <http://www.epa.gov/airtransport/actions.html>. EPA’s allocation method for existing units “bases a unit’s allocation on heat input but limits any unit’s allocation to its historic maximum emissions.” U.S. EPA, Allowance Allocation Final Rule TSD at 8 (June 2011). Generally speaking, an existing unit’s allocations are based on the unit’s highest three annual heat input values between the years 2006 and 2010, but the allocations are capped by its “historic maximum emissions,” the highest single-year actual emissions from the years 2003- 2010. *See generally*, 76 Fed. Reg. at 48,289-90. Thus, an existing unit’s allocations are based on heat input and emissions data generated over multiple years of operation.

In describing the allocation method, EPA emphasized that the method’s use of multiple years of data is intended to ensure representativeness. In the CSAPR preamble, EPA noted the allocation method for existing units begins with a review of heat input values spanning a “baseline period” from 2006 to 2010, because “[t]he allocation method uses a five-year baseline to approximate a unit’s normal operating conditions over time.” 76 Fed. Reg. at 48,289-90. Similarly, the existing unit allocation method looks to the maximum annual SO₂ and NO_x emissions over an eight-year baseline period “in order to capture the unit-level emissions before and after the promulgation of CAIR.” *Id.* at 48,290. In responding to comments on the allocation method, EPA urged that “the method and time period used to determine historic heat input rates . . . is reasonable and allows for a representative sample of past operating history to be considered for purposes of allowance allocation to existing units.” U.S. EPA, Transport Rule

Primary Response to Comments, Docket No. EPA-HQ-OAR-2009-0491 at 2485 (June 2011) (hereinafter “CSAPR Response to Comments”).

Here, the SO₂ and NO_x allowances granted to Spruce 2 are far from representative. Spruce 2’s allocations correspond to Spruce 2’s *actual emissions during 2010 alone*. Attachment C is a reproduction of the EPA allocation spreadsheet containing the emissions and heat input data underlying Spruce 2’s allocations. This Attachment shows that Spruce 2’s actual SO₂ and NO_x emissions during 2010 were well below the allocations that Spruce 2 would have received under the CSAPR FIP’s heat input formula. As a result, the allocations granted to Spruce 2 were capped at levels corresponding to the unit’s actual emissions for 2010. For example, Spruce 2’s “Initial Heat Input Based 2012 SO₂ Allocation” was 1,767 tons, but its final allocation was 158 tons, the same as its “Annual SO₂ Maximum Historic Baseline.” See Attachment C, Columns R, AD, AN. Spruce 2’s “Maximum Historic Baseline”—which ultimately dictated the unit’s allocations—was based *only* on its actual emissions from 2010. As discussed above, emissions from 2010 were not representative of the normal operation of Spruce 2 due to the fact that it was only commercially available for part of the year and experienced additional down-time for work and repairs associated with initial commissioning of the unit.

D. Spruce 2’s Allocations Should be Corrected for Representative Operations

The allowances granted to Spruce 2, which are based on a single, partial year of operation at less-than-full capacity, are not representative of normal operations and are not consistent with the principles that govern the allocation method in the CSAPR FIP. As noted, CPS Energy did not report heat inputs and emissions data to CAMD during the first three months of 2010 because the unit’s CEMS had not yet been certified, and the unit was idled for nearly three months between September and December 2010 for work and repairs associated with the initial commissioning of the unit. As a result, the emissions and heat input data for Spruce 2 from 2010—the only year that serves as a basis for the unit’s allowance allocations—does not come anywhere close to the level that CPS Energy would expect Spruce 2 to achieve in a full year of representative operations. CPS Energy requests that the annual NO_x and SO₂ allocations granted to Spruce 2 be corrected to account for representative operations.

The CSAPR Response to Comments document indicates that EPA has already taken similar steps to correct the allocations for similarly-situated units. EPA explained that “[i]n response to comments on the January 7, 2011 NODA, EPA updated its underlying data tables for allocations where appropriate. Specifically, it made updates to its unit level heat input and emission values where submitted by commenter [sic] with a reasonable explanation on why the previous values were incorrect.” CSAPR Response to Comments at 2838. Referencing a situation nearly identical to the one presented here, EPA stated that

Another case of data correction are instances where sources suggested the data for a particular year at their source was not representative because the source began operation that year and therefore the annual data just reflect a partial year's worth of operation. In these instances, EPA made adjustments to its historic

emissions and heat input values used to determine allowance allocations.

Id.

Here, a similar correction is necessary and appropriate on reconsideration. Because EPA did not originally propose to include Texas in CSAPR, and because EPA did not issue proposed annual allowance allocations for Texas sources, it was not practicable for CPS Energy to comment on the allocations ultimately granted to Spruce 2 until after the final issuance of CSAPR.

CPS Energy recognizes that because Spruce 2 is a new, well-controlled state-of-the-art unit, its allowance allocations are most likely to be limited by its actual emissions, rather than set by the unit's heat input under the CSAPR method for determining allocations. For purposes of comparison, the J.T. Deely Units 1 and 2, two units that are smaller than Spruce 2 as measured by heat input, were granted 5,002 and 4,931 SO₂ allowances.⁴ See Attachment C, Column AN. Spruce 2, which is larger than the two J.T. Deely units by heat input, would stand to receive more allocations than the two J.T. Deely units if its allocations were not capped by maximum historical emissions.⁵ However, Spruce 2 is authorized to emit no more than 2,102 tons per year of SO₂ and 1,752 tons per year of NO_x, so it follows that Spruce 2's maximum annual emissions could never exceed those values. CPS Energy believes that these permitted levels—2,102 tons per year of SO₂ and 1,752 tons per year of NO_x—represent reasonable annual allowance allocations for Spruce 2, given the lack of representative heat input and historical data for the unit. Because the ozone season is five months in duration, a representative ozone-season NO_x allocation would be 730 tons, which is 5/12 of Spruce 2's annual NO_x limit.⁶

At a minimum, CPS Energy requests that EPA provide allowances to Spruce 2 based upon operations that are representative of the unit. CPS Energy believes that the months of June, July, and August 2010 provide a period of representative operation for Spruce 2. This was a period of stable operation for Spruce 2, and it falls after the unit's CEMS was certified, but before the unit was idled for repairs in September. During this three-month period, Spruce 2 emitted 111 tons SO₂ and 380 tons NO_x as reported to the CAMD. Multiplying these three-month values by four gives 12-month values of 444 tons SO₂ and 1,520 tons NO_x. Likewise, scaling the unit's NO_x emissions to a five-month value for the ozone-season NO_x allocation gives a value of 633 tons. Those values reflect representative emissions values for Spruce 2 that

⁴ These values are the Deely units' allocations in the CSAPR FIP as issued in final form in July 2011. See "Final CSAPR Unit Level Allocations Under the FIP" (July 18, 2011). On October 6, 2011, EPA proposed to adjust the two Deely units' SO₂ allowances to 6,612 and 6,512 tons respectively, but EPA did not propose to change Spruce 2's allowance allocations. See "FIP Unit Level Allocations with Proposed Revisions to CSAPR" (Oct. 6, 2011).

⁵ Spruce 2 is permitted to operate at up to 8,000 mmBTU/hr. If maintained over an 8,760-hour year, that limit would translate to 72,080,000 mmBTU. CPS Energy projects that the annual heat input of Spruce 2 may approach 62,000,000 mmBTU in a given year. In contrast, the CSAPR FIP allocations spreadsheet lists three-year average heat inputs of 34,718,621mmBTU for J.T. Deely Unit 1 and 34,221,384 mmBTU for J.T. Deely Unit 2. See Attachment C, Column K.

⁶ Under CSAPR, the ozone season is May 1 – September 30. See 76 Fed. Reg. 48,264.

should be used for determining allowance allocations under the CSAPR FIP as an alternative to relying on the permitted emissions limits.

E: Conclusion

CPS Energy urges EPA to grant its petition for reconsideration and correct the emissions allocations granted to Spruce 2 upward to the above-listed representative levels. Further, CPS Energy requests that as part of any reconsideration of CSAPR, EPA provide CPS Energy and other similarly-situated publicly-owned municipal utilities their fair and equitable portion of any additional allowances granted to Texas.

Dated: October 7, 2011



On Behalf of CPS Energy

Derek R. McDonald
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1500 San Jacinto Center
98 San Jacinto Boulevard
Suite 1500
Austin TX 78701-4078
(512) 322-2667
derek.mcdonald@bakerbotts.com



ATTACHMENT A

November 23, 2009

Ms. Christine Bergren
Manager Air Section
Texas Commission on Environmental Quality
Region 13
14250 Judson Road
San Antonio, TX 78233

Re: J.K. Spruce 2 Unit – Commence Commercial Operation Date
and Emission Point Startup Notification(s)
Permits: 70492 and PSDTX1037
Calaveras Lake Plant
FOP #08
CN600129019
RN100217975
Acct. No. BG-0057-U

Dear Ms. Bergren:

This correspondence is to update your office on a change in the date that the JK Spruce 2 unit commenced commercial operation. The unit placed power on the electric grid on November 22nd, not on November 21st as anticipated.

In addition, this letter is serving to provide notice on the start up of the emergency generator tank (T3 and T4) emission points and the emergency generators (EMGEN-1 and EMGEN-2), as required under 40 CFR 60.7(a)(3) and TAC 116.115(b)(2)(B)(ii). The tanks were filled on November 18th and the generators run the same day.

If you have questions about any startup related activity at the plant, please contact me at (210) 353-2077.

Sincerely,

Doris Cooksey
Environmental Analyst IV
Water and Air Quality Section

cc: Edgar Sawyer, TCEQ Region 13
Eric Hendrickson, TCEQ Office of Permitting, Remediation & Registration
David Garcia, EPA Region VI
J.K. Spruce Team



November 17, 2009

Ms. Christine Bergren
Air Section Manager
Texas Commission on Environmental Quality, Region 13
14250 Judson Road
San Antonio, TX 78233-4480

Re: J.K. Spruce Electric Generating Unit No. 2, Calaveras Lake Plant
Air Quality Permit Nos. 70492 & PSD-TX-1037; CN600129019, RN100217975

Dear Ms. Bergren:

On July 22 and October 6, 2009, City Public Service ("CPS") notified you of its ongoing work toward startup of the new J.K. Spruce Electric Generating Unit 2 ("Spruce 2") at the Calaveras Lake Plant. This letter is to clarify that Spruce 2's "Startup Date," as evidenced by the Unit's first production of electricity, will occur on November 21, 2009 or on a date shortly thereafter. The specific date that Spruce 2 first puts electricity on the grid requires approval by the Electric Reliability Council of Texas ("ERCOT") and has not yet been finalized. However, CPS expects that the Startup Date will be within a few days of November 21, and we will provide subsequent written confirmation of the exact Startup Date after first production of electricity occurs.

Our review of federal and state regulations and guidance indicates that an electric generating unit's "startup," as that term is used in the federal NSPS regulations, occurs when the unit first drives turbines to produce electricity. Although our earlier correspondence of October 6, 2009 provided notice that Spruce 2 began startup activities on October 2, 2009, we believe that the Unit's official Startup Date should be established as the date that Spruce 2 first produces electricity. Accordingly, CPS will complete the initial performance testing that is required by the above-referenced air permit and federal NSPS requirements no later than 60 days after achieving maximum fuel firing rate or 180 days after the Unit's November 2009 Startup Date, whichever is earlier.

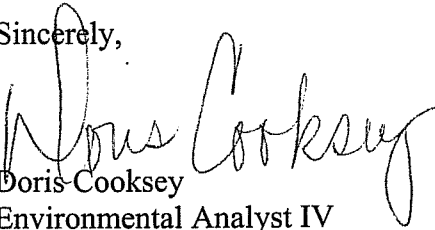
As the date that the Spruce 2 first produced electricity, the Startup Date will also represent the date that Spruce 2 "commences commercial operation" as that term is defined in the federal Acid Rain regulations. While CPS initially offered 45-day notice of Spruce 2's planned startup date by letter dated July 22, 2009, this letter will also serve to confirm that the upcoming Startup Date is the date that Spruce 2 will "commence commercial operation" under the federal Acid Rain program. Accordingly, CPS will ensure that all monitoring systems required by this program are certified no later than 90 unit operating days of this date.

Christine Bergren, TCEQ

November 17, 2009

We can discuss this and other issues related to the startup of Spruce 2 during our tentatively scheduled December 7th meeting. In the meantime, please do not hesitate to contact me.

Sincerely,



Doris Cooksey
Environmental Analyst IV
Water and Air Quality Section

cc: Edgar Sawyer, TCEQ Region 13
Erik Hendrickson, TCEQ, Austin
David Garcia, EPA Region VI
J.K. Spruce Team



ATTACHMENT B

CPS/CPP Letter No. 314
May 28, 2010

Mr. James A. Hengel
Project Manager,
Calaveras Power Partners, LP
11401 Lamar
Overland Park, Kansas 66211

Ref: Response to CPP Letter No. 909 – Notice of Provisional Acceptance

Mr. Hengel,

We are in receipt of your Notice of Provisional Acceptance, Letter #909. CPS Energy accepts your Notice and affirms that all of the requirements listed in Article 6.5.1 through 6.5.10 have been met as of **May 27, 2010 ("Provisional Acceptance Date")**. This Notice serves as CPS Energy's issuance of the Provisional Acceptance Certificate. For clarification purposes only, care, custody and control of the Facility does not transfer until issuance of the Provisional Acceptance Certificate, which is the date this Notice is issued (May 28, 2010).

If you have any questions, please contact me.

Regards,

Richard Pena
Senior Vice President
Energy development

cc: Chris Irwin, CPP
Morgen Fagan, CPP
Rick Anderson, CPP
Ed Alarcon, CPS Energy
Jim Schwegmann
Kathy Yates, CPS Energy
Tri Dang, CPS Energy
Mike Kotara, CPS Energy
Joey Goode, CPS Energy
Jeff Kruse, CPS Energy
Chris Lehan, Burns and McDonnell

ATTACHMENT C

	A	B	C	D	E	F	G	H	I	J	K	L	M
1						Step 1					Steps 2 & 3	Step 4	Step 5
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	2006 Annual Heat Input (mmBtu)	2007 Annual Heat Input (mmBtu)	2008 Annual Heat Input (mmBtu)	2009 Annual Heat Input (mmBtu)	2010 Annual Heat Input (mmBtu)	Unit Level Average of 3 Highest Non-Zero Annual Heat Inputs from 2006 to 2010 (mmBtu)	State Level Summation of Unit Level Three Year Average Annual Heat Input (mmBtu)	Unit 's Percentage Share of State's Annual Heat Input
3	Calculation										Average of three highest non-zero values in columns F - J	Sum column K values to get State level totals	Column K divided by column L
4	J K Spruce	Texas	7097	**1	2939	44,028,186	44,448,306	48,199,092	39,991,381	48,114,827	46,920,742	3,538,544,336	0.013260
5	J K Spruce	Texas	7097	**2	2940					26,984,711	26,984,711	3,538,544,336	0.007626
6	J T Deely	Texas	6181	1	2832	35,117,941	38,686,698	30,351,223	25,213,105	28,292,203	34,718,621	3,538,544,336	0.009812
7	J T Deely	Texas	6181	2	2833	31,986,282	36,189,586	32,504,053	25,754,618	33,970,515	34,221,384	3,538,544,336	0.009671

	A	B	C	D	E	N	O	P	Q	R	S	T	U
1	Step 6												
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	Annual SO ₂ 2012 State Budget for Existing Units (tons)	Annual SO ₂ 2014 State Budget for Existing Units (tons)	Annual NO _x 2012 State Budget for Existing Units (tons)	Annual NO _x 2014 State Budget for Existing Units (tons)	Initial Heat Input Based 2012 SO ₂ Allocation (tons)	Initial Heat Input Based 2014 SO ₂ Allocation (tons)	Initial Heat Input Based 2012 Annual NO _x Allocation (tons)	Initial Heat Input Based 2014 Annual NO _x Allocation (tons)
3	Calculation									Column M x column N	Column M x column O	Column M x column P	Column M x column Q
4	J K Spruce	Texas	7097	**1	2939	231,756	231,756	129,587	129,587	3,073	3,073	1,718	1,718
5	J K Spruce	Texas	7097	**2	2940	231,756	231,756	129,587	129,587	1,767	1,767	988	988
6	J T Deely	Texas	6181	1	2832	231,756	231,756	129,587	129,587	2,274	2,274	1,271	1,271
7	J T Deely	Texas	6181	2	2833	231,756	231,756	129,587	129,587	2,241	2,241	1,253	1,253

	A	B	C	D	E	V	W	X	Y	Z	AA	AB	AC	AD
1	Step 7													Step 8
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	2003 Annual SO ₂ Emissions (tons)	2004 Annual SO ₂ Emissions (tons)	2005 Annual SO ₂ Emissions (tons)	2006 Annual SO ₂ Emissions (tons)	2007 Annual SO ₂ Emissions (tons)	2008 Annual SO ₂ Emissions (tons)	2009 Annual SO ₂ Emissions (tons)	2010 Annual SO ₂ Emissions (tons)	Annual SO ₂ Maximum Historic Baseline (tons)
3	Calculation													Highest value of columns V - AC
4	J K Spruce	Texas	7097	**1	2939	3,786	4,133	3,766	3,274	3,394	3,783	890	1,131	4,133
5	J K Spruce	Texas	7097	**2	2940								158	158
6	J T Deely	Texas	6181	1	2832	11,687	11,432	10,800	10,921	12,120	10,709	8,419	9,671	12,120
7	J T Deely	Texas	6181	2	2833	9,896	10,999	11,074	9,896	11,416	11,366	8,624	11,539	11,539

	A	B	C	D	E	AE	AF	AG	AH	AI	AJ	AK	AL
1	Step 7												
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	2003 Annual NO _x Emissions (tons)	2004 Annual NO _x Emissions (tons)	2005 Annual NO _x Emissions (tons)	2006 Annual NO _x Emissions (tons)	2007 Annual NO _x Emissions (tons)	2008 Annual NO _x Emissions (tons)	2009 Annual NO _x Emissions (tons)	2010 Annual NO _x Emissions (tons)
3	Calculation												
4	J K Spruce	Texas	7097	**1	2939	4,294	4,519	4,027	3,788	2,914	3,108	2,519	2,938
5	J K Spruce	Texas	7097	**2	2940								560
6	J T Deely	Texas	6181	1	2832	2,696	2,538	2,266	2,234	2,479	2,057	1,794	1,945
7	J T Deely	Texas	6181	2	2833	2,305	2,464	2,337	2,009	2,291	2,150	1,863	2,355

	A	B	C	D	E	AM	AN	AO	AP	AQ
1						Step 8	Steps 9 & 10			
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	Annual NO _x Maximum Historic Baseline (tons)	Final Cross-State Air Pollution Rule Unit Level SO ₂ Allocation 2012 (tons)	Final Cross-State Air Pollution Rule Unit Level SO ₂ Allocation 2014 (tons)	Final Cross-State Air Pollution Rule Unit Level NO _x Annual Allocation 2012 (tons)	Final Cross-State Air Pollution Rule Unit Level NO _x Annual Allocation 2014 (tons)
3	Calculation					Highest value of columns AE - AL	(Lesser of column AD and R) + reapportionment if R < AD	(Lesser of column AD and S) + reapportionment if S < AD	(Lesser of column AM and T) + reapportionment if T < AM	(Lesser of column AM and U) + reapportionment if U < AM
4	J K Spruce	Texas	7097	**1	2939	4,519	4,133	4,133	2,395	2,395
5	J K Spruce	Texas	7097	**2	2940	560	158	158	560	560
6	J T Deely	Texas	6181	1	2832	2,696	5,002	5,002	1,772	1,772
7	J T Deely	Texas	6181	2	2833	2,464	4,931	4,931	1,747	1,747

	A	B	C	D	E	AR	AS	AT	AU	AV	AW	AX
1						Step 1					Steps 2 & 3	Step 4
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	2006 Ozone Season Heat Input (mmBtu)	2007 Ozone Season Heat Input (mmBtu)	2008 Ozone Season Heat Input (mmBtu)	2009 Ozone Season Heat Input (mmBtu)	2010 Ozone Season Heat Input (mmBtu)	Unit Level Average of 3 Highest Non-Zero Ozone Season Heat Inputs from 2006 to 2010 (mmBtu)	State Level Summation of Unit Level Three Year Average Ozone Season Heat Input (mmBtu)
3	Calculation										Average of three highest non-zero values in columns AR - AV	Sum column AW values to get State level totals
4	J K Spruce	Texas	7097	**1	2939	19,846,693	22,499,488	20,904,217	16,958,857	20,692,818	21,365,508	1,743,648,990
5	J K Spruce	Texas	7097	**2	2940					22,241,829	22,241,829	1,743,648,990
6	J T Deely	Texas	6181	1	2832	16,297,190	16,540,000	16,489,191	13,478,260	14,377,808	16,442,127	1,743,648,990
7	J T Deely	Texas	6181	2	2833	16,200,162	16,253,798	13,730,475	13,247,432	14,505,017	15,652,992	1,743,648,990

	A	B	C	D	E	AY	AZ	BA	BB	BC
1						Step 5	Step 6			
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	Unit 's Percentage Share of State's Ozone Season Heat Input	Ozone Season NO _x 2012 State Budget for Existing Units (tons)	Ozone Season NO _x 2014 State Budget for Existing Units (tons)	Initial Heat Input Based 2012 Ozone Season NO _x Allocation (tons)	Initial Heat Input Based 2014 Ozone Season NO _x Allocation (tons)
3	Calculation					Column AW divided by column AX			Column AY x column AZ	Column AY x column BA
4	J K Spruce	Texas	7097	**1	2939	0.012253	61,152	61,152	749	749
5	J K Spruce	Texas	7097	**2	2940	0.012756	61,152	61,152	780	780
6	J T Deely	Texas	6181	1	2832	0.009430	61,152	61,152	577	577
7	J T Deely	Texas	6181	2	2833	0.008977	61,152	61,152	549	549

	A	B	C	D	E	BD	BE	BF	BG	BH	BI	BJ	BK
1	Step 7												
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	2003 Ozone Season NO _x Emissions (tons)	2004 Ozone Season NO _x Emissions (tons)	2005 Ozone Season NO _x Emissions (tons)	2006 Ozone Season NO _x Emissions (tons)	2007 Ozone Season NO _x Emissions (tons)	2008 Ozone Season NO _x Emissions (tons)	2009 Ozone Season NO _x Emissions (tons)	2010 Ozone Season NO _x Emissions (tons)
3	Calculation												
4	J K Spruce	Texas	7097	**1	2939	1,990	1,877	1,797	1,741	1,425	1,332	1,064	1,222
5	J K Spruce	Texas	7097	**2	2940								455
6	J T Deely	Texas	6181	1	2832	1,204	1,145	1,071	1,044	1,080	1,141	979	975
7	J T Deely	Texas	6181	2	2833	1,185	1,123	946	1,034	1,047	939	959	984

	A	B	C	D	E	BL	BM	BN	BO	BP	BQ	BR	BS	BT
1						Step 8	Steps 9 & 10		Data Flags					
2	Plant Name	State	ORIS ID	Boiler ID	CAMD Unit ID	Ozone Season NO _x Maximum Historic Baseline (tons)	Final Cross-State Air Pollution Rule Unit Level NO _x Ozone Season Allocation 2012 (tons)	Final Cross-State Air Pollution Rule Unit Level NO _x Ozone Season Allocation 2014 (tons)	Cross-State Air Pollution Rule Annual Program?	Group 1?	Group 2?	Cross-State Air Pollution Rule Ozone Season Program?	EIA Data Substitution	Comment Data Substitution
3	Calculation					Highest value of columns BD - BK	(Lesser of column BL and BB + reapportionment if BB < BL	(Lesser of column BL and BC + reapportionment if BC < BL						
4	J K Spruce	Texas	7097	**1	2939	1,990	1,077	1,077	Y		Y	Y		
5	J K Spruce	Texas	7097	**2	2940	455	455	455	Y		Y	Y		
6	J T Deely	Texas	6181	1	2832	1,204	828	828	Y		Y	Y		
7	J T Deely	Texas	6181	2	2833	1,185	789	789	Y		Y	Y		