BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

DIRECT TESTIMONY
OF
Stuart Lowry

DOCKET NO. 12-MKEE-380-RTS

Q. Please state your name.

A. My name is Stuart S. Lowry.

Q. Are you an officer of Mid-Kansas Electric Company, LLC ("Mid-Kansas")?

A. Yes, I am the President and Chief Executive Officer of Mid-Kansas and have been since August 2011.

Q. By whom are you employed and what is your business address?

A. I am employed by Sunflower Electric Power Corporation ("Sunflower"). My business address is 301 W. 13th Street, Hays, Kansas. I am not an employee of Mid-Kansas as it has no employees. By contract approved by the Kansas Corporation Commission ("KCC" or "Commission"), Sunflower, through its employees, operates Mid-Kansas.[1]

[1] The original Service and Operation Agreement (available on the Commission's website at http://estar.kcc.ks.gov/estar/portal/kcc/page/docket-docs/PSC/DocketDetails.aspx?DocketId=61fc7358-59e9-49b3-a57f-9e9de6b0148d) was approved by the Commission in the Order Adopting Stipulation and Agreement, KCC Docket No. 06-MKEE-524-ACQ, ¶ 14.B. (Feb. 23, 2007), available on the Commission's website at http://www.kcc.state.ks.us/scan/200702/20070223114828.pdf *(2007 Acquisition Order)*. The Agreement is also available on the Commission's website at: http://estar.kcc.ks.gov/estar/portal/kcc/page/docket-docs/PSC/DocketDetails.aspx?DocketId=3fa03184-9702-45cc-8957-0e44759aa03e. This is the currently effective version, which was approved in the Order Approving Spin-Down of Distribution Assets, Docket No. 08-MKEE-099-MIS (Dec. 21, 2007) (*Distribution Transfer Order*), available on the Commission's website at http://estar.kcc.ks.gov/estar/ViewFile.aspx?Id=95db96d0-03e6-4c96-8a16-b04d2d239104

Q. When did you become the President and Chief Executive Officer of Mid-Kansas?

A. I began in such position in 2011 when I was selected by the Mid-Kansas Board of Directors to serve as its President and Chief Executive Officer.

Q. What is your educational and professional background?

I am a graduate of the University of Kansas and Washburn University School of Law. Just prior to joining Mid-Kansas, I served as Executive Vice-President/General Counsel at Kansas Electric Cooperatives, Inc., the Kansas statewide organization from 2004 to 2011. Prior to that, I was engaged in the private practice of law.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide: (1) background information on Mid-Kansas; (2) background and summary information of the Application including the general rate impacts of establishing a divisional rate of Mid-Kansas for the geographical area of the Mid-Kansas certificated territory serviced by Southern Pioneer Electric Company ("Southern Pioneer"), a member of Mid-Kansas, and (3) briefly address the Cross-State Air Pollution Rule.

A. BACKGROUND INFORMATION ON MID-KANSAS

Q. Please provide an overview of the business of Mid-Kansas.

A. Mid-Kansas is a Kansas limited liability company with its principal place of business located in Hays, Kansas. Mid-Kansas is owned by five Kansas consumer-owned cooperatives and one subsidiary of a consumer-owned

cooperative who organized Mid-Kansas for the purpose of acquiring and operating the former Aquila-WPK electric utility business and operations. The five Kansas cooperatives and subsidiary company, collectively referred to as Mid-Kansas Members, and their headquarters are as follows: Lane-Scott Electric Cooperative, Inc., Dighton; Prairie Land Electric Cooperative Association, Inc., Norton; Victory Electric Cooperative Association, Inc., Dodge City; Western Cooperative Electric Association, Inc., WaKeeney; Wheatland Electric Cooperative, Inc., Scott City and Southern Pioneer Electric Company, a subsidiary of Pioneer Electric Cooperative, Inc., Ulysses. Mid-Kansas was organized in 2005. The five cooperative Members of Mid-Kansas plus Pioneer Electric also own Sunflower Electric Power Corporation.

Q. When did Mid-Kansas acquire the Aquila-WPK electric assets?

A. Mid-Kansas was notified that it was the successful bidder for the Aquila-WPK electric assets in September, 2005. On November, 15, 2005, Aquila and Mid-Kansas made a joint filing before the Commission to transfer the Kansas electric assets to Mid-Kansas. On February 23, 2007, the Commission issued an order approving the sale and transfer of the Aquila-WPK electric assets to Mid-Kansas. Mid-Kansas subsequently began operation of those assets on April 1, 2007.

Q. Please describe the current rate structure of Mid-Kansas.

A. Prior to Mid-Kansas's rate case in Docket No. 09-MKEE-969-RTS (969 Docket), Mid-Kansas had adopted the rate structure of Aquila that existed at the time of the acquisition. In the 969 Docket, Mid-Kansas established a rate structure to facilitate its transition to a typical cooperative model structure. The cooperative

model consists of a generation and transmission cooperative ("G&T") serving its distribution cooperative members who also own the G&T. To facilitate this model, wholesale rates were established for the G&T segment of Mid-Kansas and Mid-Kansas divisional rates were established for five of the six geographical areas served by the Mid-Kansas members pursuant to the Electric Customer Service Agreements (Service Agreements). In the prior case, Mid-Kansas retained the Aquila rates as its divisional rates for the geographic area served by Wheatland. Wheatland subsequently filed and reached settlement for an update to its divisional rates in Docket 11-MKEE-439-RTS.

Q. Mr. Lowry, please describe the generation and transmission assets acquired by Mid-Kansas that are used to provide wholesale electric service to the Mid-Kansas Members.

A. Mid-Kansas owns approximately 1,083 miles of transmission line facilities and associated substation facilities which consists of 932 miles of 115 kV, 76 miles of 138 kV and 171 miles of 230 kV transmission line and 40 substations. Mid-Kansas owns 389 MW of gas-fired generation which consists of 145 MW at Fort Dodge Station, 99 MW at Great Bend Station, 68 MW at Clifton Station; and 77 MW at Cimarron River Station. Additionally, Mid-Kansas has a purchase power agreement for 175 MW of coal-fired capacity from Jeffrey Energy Center and 75 MW of wind generation which consists of 50 MW from the Gray County Wind facility and 25 MW from the Smoky Hills Wind Farm facility.

Q. You previously said that five of the six Members of Mid-Kansas are consumer-owned cooperatives. What does that mean?

A. Five of the Members of Mid-Kansas are non-profit cooperative corporations owned by their customers. All of the electric customers of these Members become owners of the cooperative when they purchase utility service from the cooperative. That is, all year-end revenues in excess of the cooperatives' actual cost of service are allocated to capital accounts for the benefit of the customers, and may be periodically refunded to the customer. In addition, members participate in management oversight of the cooperative by electing its directors. In a cooperative utility, the ratepayers and the owners of the utility are one and the same. There are no competing interests between stockholders who want higher returns and customers who want lower rates and better service.

Q. The sixth member, Southern Pioneer is not a consumer owned cooperative. What does that mean?

A. Southern Pioneer is formed as a C-Corporation as opposed to a non-profit member-owned cooperative. However, Southern Pioneer agreed to operate as any other similarly situated not-for-profit taxable entity and not remit dividends to its sole shareholder Pioneer Electric without KCC and lender approvals.[2] So, Southern Pioneer is operated much like a consumer-owned cooperative in that there are no competing interests between the stockholders and customers. This is more fully described in Mr. Epperson's testimony.

Q. Does operating like a consumer-owned cooperative mean that rates are not an issue?

2 Docket No. 06-MKEE-524-ACQ, Stipulation and Agreement filed January 10, 2007, p. 14, para. 26.

A. No, rates are an issue because cooperative members want low rates like anyone else. However, in a cooperative business model, there are not competing interests between the ratepayer and the owner of the utility as there are with an investor owned utility. In a cooperative, only the customer is benefited if rates exceed the cost of service, so there is no incentive for the cooperative to charge rates in excess of the true cost of service. As pointed out in Mr. Epperson's testimony, there is no external motive for Southern Pioneer to charge more than necessary to provide efficient and sufficient service and meet the loan covenants of its lender.

Q. Is Mid-Kansas and the operations provided by the Members of Mid-Kansas regulated by the KCC?

A. Yes. Mid-Kansas and the operations of the service territory by the Mid-Kansas Members are currently fully regulated by the Commission and will continue to be regulated unless Mid-Kansas or any eligible Mid-Kansas Member seeks to remove Commission regulation over their rates pursuant to the provisions found in K.S.A. 66-104d. It is important to note that the certified service territory of Mid-Kansas must be transferred to its Members prior to them seeking to de-regulate and that Southern Pioneer is not currently eligible to de-regulate.

B. OVERVIEW OF THE APPLICATION

Q. Please provide a brief summary of the Application?

A. Basically, Mid-Kansas is requesting an increase in the divisional rate for the designated geographical service territory served by Southern Pioneer. Specifically, Mid-Kansas is proposing a Debt Service Coverage (DSC)

Ratemaking approach for a five year time period (DSC Ratemaking Plan). As more fully explained later in my testimony and in the testimony of Mr. Rich Macke, DSC Ratemaking provides a method for periodic adjustments to rates, as necessary, to achieve a specified DSC level. The periodic adjustments can occur over any specified period of time, but in the case of Southern Pioneer, Mr. Macke recommends a five year time frame, with the first annual filing occurring in 2013. The purpose behind utilizing the DSC Ratemaking Plan is to financially strengthen Southern Pioneer and ensure reliable service at reasonable rates as Mid-Kansas continues on the course of transferring its certificate for the Southern Pioneer territory to Southern Pioneer.

Q. What do you mean by divisional rates?

A. Currently, the Mid-Kansas customers are served through Commission approved divisional rates that are based on specific cost of service of the customers served by the individual Mid-Kansas Member. In this Application, Mid-Kansas is requesting that the Commission approve divisional rates for the geographical area of Mid-Kansas' certificated territory which rates are based in large part upon the specific cost of service rendered to Mid-Kansas by Southern Pioneer for service of the Mid-Kansas customers in that geographic service area.

Q. Will this rate change affect other Mid-Kansas customers served through the Mid-Kansas Members?

A. No. The application does not seek the implementation of any changes in the rates established in the other dockets for any other divisional retail or wholesale rates of Mid-Kansas, other than for the Southern Pioneer Division.

Q. Why is there a need for divisional rates?

A. The customers served by the Mid-Kansas Members are Mid-Kansas customers, although their primary contact and relationship is with the servicing Mid-Kansas Member, in this case Southern Pioneer. The services provided to Mid-Kansas pursuant to the Service Agreements with each Member results in differing cost of service for the customers served by each Mid-Kansas Member, thereby resulting in the need for a Mid-Kansas rate specifically applicable to the customers within the specific geographical area served by the individual Mid-Kansas Member. Therefore, until the certified service territory and associated customers are transferred to Mid-Kansas Members, divisional rates are necessary to insure rates to the customers are just and reasonable.

Q. Previously you mentioned DSC Ratemaking. Please expand upon that discussion.

A. As I stated earlier, Mr. Macke will more fully address DSC Ratemaking and the DSC Ratemaking Plan that Mid-Kansas is proposing for Southern Pioneer, but I will provide a brief explanation of these concepts. First, DSC Ratemaking is an alternative ratemaking approach, as opposed to traditional ratemaking, that provides design and operational flexibility to begin building long-term financial stability, increases utility and regulatory efficiencies and reduces regulatory approval lag, which ultimately and directly reduces operating costs associated with seeking prolonged and frequent regulatory approvals. With DSC Ratemaking, Mid-Kansas' cost of service for the Southern Pioneer division would be tied to a certain ratio for its Debt Service Coverage.

Q. How does DSC Ratemaking work within the Plan proposed by Mid-Kansas?

A. Mid-Kansas proposes that the DSC Ratemaking approach be implemented using a five year timeframe which will include annual adjustments over this five year period based upon a graduated DSC ratio. In this initial docket, rates for the first and second years of the Plan would be based upon a DSC ratio of 1.8. That ratio would increase in the third year to 1.9, and to 2.0, in the fourth and fifth years. Rates would be adjusted on a forward-going basis each year to reflect the increased ratio.

Q. What is the rate impact to the customers served by Southern Pioneer?

A. It depends on whether the Commission accepts Mid-Kansas' use of the DSC Ratemaking Plan. Mid-Kansas proposes in its Application that a DSC ratio of 2.0 be used to establish rates in this docket if the DSC Ratemaking Plan with annual adjustments is not approved by the Commission. As such, rates resulting from this docket will be higher than if the DSC Ratemaking Plan is approved, since the Plan begins with a DSC ratio of 1.8. The financial stability and revenue assurances Southern Pioneer and Mid-Kansas receive from the existence of the DSC Ratemaking Plan allow Mid-Kansas to accept lower revenues during the first years of the Plan than what would be needed absent those assurances. As such, the DSC Ratemaking Plan benefits our customers while also assisting Mid-Kansas in strengthening the finances of its Southern Pioneer division and improving its capital structure.

C. THE CROSS-STATE AIR POLLUTION RULE

Q. Are you familiar with the status of the Cross-State Air Pollution Rule ("CSAPR") and its potential impact on electric utilities in the State of Kansas?

A. Yes, I am very familiar with this issue.

Q. How do you see the CSAPR impacting Mid-Kansas and/or Southern Pioneer?

A. Although the potential impact of this rule on Mid-Kansas and its Members is great, I do not believe it is an issue at this point for purposes of the rate-setting request contained in this application. However, because of the overall importance of the issue, I will address it generally in my testimony.

Q. Can you give the Commission some background on the CSAPR?

A. I have attached to my testimony as Exhibit SSL-1 the sworn Declaration of Mr. Wayne E. Penrod, Manager of Environmental Policy for Sunflower Electric, which provides an explanation of the background and status of the CSAPR, its potential impact on cooperatives in Kansas, and changes to the implementation of the rule needed in order to protect customers while complying with the EPA's mandates. Mr. Penrod is the subject matter expert on environmental regulations and is most familiar with CSAPR issues. Mr. Penrod's Declaration was submitted as part of an action filed by a coalition of Kansas utility companies in the United States Court of Appeals for the District of Columbia Circuit petitioning the Court

for a Stay of the CSAPR.[3]

Q. Why do you believe that the CSAPR is not an issue for purposes of this rate case?

A. I do not want to downplay the impact the CSAPR could have on all utility companies in Kansas, including Mid-Kansas and Southern Pioneer, however, this rate case is being filed for purposes of establishing retail and LAC rates based upon historical test year data. As such, the potential costs of the CSAPR are not part of the cost of service information submitted in this case.

However, as the Commission can see from the Declaration of Mr. Penrod, if the effective date of the CSAPR is not delayed or some other action is not taken by the EPA or the Court of Appeals, compliance with the CSAPR by Mid-Kansas could potentially have negative effects on the reliability of service provided to Mid-Kansas customers and Members, and therefore, the rule will impact service reliability for the retail customers they serve, including Southern Pioneer's. Sunflower and Mid-Kansas participated in the Commission's public hearing on the impacts of CSAPR on November 30th, and will fully address all issues related to CSAPR in the general investigation docket the Commission indicated it would open. Again, this is a significantly critical issue confronting Kansas electric utilities, but it does not change the issues being addressed in this standard rate case application.

3 *State of Kansas v. United States Environmental Protection Agency,* Case No. 11-1329.

D. CONCLUSION

Q. In summary what are the actions Mid-Kansas is requesting of the Commission?

A. As stated in the Application, Mid-Kansas is requesting approval of the following:

- Divisional retail rate for Mid-Kansas retail customers that reflects the DSC Ratemaking approach in providing retail electric service to the Mid-Kansas' customers served by Southern Pioneer.
- Approval the DSC Ratemaking Plan which applies the DSC Ratemaking approach over a five year timeframe with annual rate adjustments to continue in compliance with the DSC target ratio established in this docket.
- Local access charge and line loss that reflects the appropriate DSC Ratemaking approach in providing electric service to the third-party users of the 34.5 kV system owned by Southern Pioneer.
- The deferral and reservation by the Commission of the classification of the 34.5 kV and appropriate lower voltage facilities as provided for at paragraphs 10 and 11 of the Stipulation and Agreement approved by the Commission in the 969 Docket as that is currently being addressed in Docket 11-GIME-597-GIE.

Q. Does this conclude your testimony?

A. Yes.

Declaration of Wayne E. Penrod

Manager, Environmental Policy,

SUNFLOWER ELECTRIC POWER CORPORATION

INITIAL PETITION FOR REQUEST FOR STAY OF THE

FEDERAL IMPLEMENTATION PLANS: INTERSTATE TRANSPORT OF FINE PARTICULATE MATTER

AND OZONE AND CORRECTION OF SIP APPROVALS

(THE CROSS-STATE AIR POLLUTION RULE (CSAPR))

76 Fed. Reg. 48208 (August 8, 2011); Docket ID No. EPA-HQ-OAR-2009-0491

Wayne E. Penrod, being first duly sworn upon oath, deposes and says:

1. I am the Executive Manager, Environmental Policy for Sunflower Electric Power Corporation and serve in a similar capacity for Mid-Kansas Electric Company, LLC (Mid-Kansas), both of which are located in western Kansas. Sunflower and Mid-Kansas are not-for profit electric generation and transmission cooperative corporations owned and operated by the rural electric distribution cooperatives to which they supply electricity. These distribution cooperatives, in turn, are owned by their members who are electric consumers—families, farms, and other businesses. These electric consumers select their distribution cooperative board members through democratic elections, and those board members in turn appoint the board members of Sunflower and Mid-Kansas.
2. Sunflower is owned by members Lane-Scott Electric Cooperative, Inc., Dighton, KS; Prairie Land Electric Cooperative, Inc., Norton, KS; Pioneer Electric Cooperative, Inc., Ulysses, KS; The Victory Electric Cooperative Association, Inc., Dodge City, KS; Western Cooperative Electric Association, Inc., WaKeeney, KS; and Wheatland Electric Cooperative, Inc., Scott City, KS.
3. Mid-Kansas Electric Company, LLC, is made up of five rural electric cooperatives and one wholly-owned subsidiary: Lane-Scott Electric Cooperative, Inc., Dighton, KS; Prairie Land Electric Cooperative, Inc., Norton, KS; Southern Pioneer Electric Company, Ulysses, KS (a wholly-owned

EXHIBIT

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subsidiary of Pioneer Electric Cooperative, Inc.); The Victory Electric Cooperative Association, Inc., Dodge City, KS; Western Cooperative Electric Association, Inc., WaKeeney, KS; and Wheatland Electric Cooperative, Inc., Scott City, KS.

4. Together, the electrical power provided by Sunflower and Mid-Kansas to these distribution cooperatives and more than 25 municipalities within the service area meets the electricity requirements of more than 400,000 people in central and western Kansas. The people served at retail by the distribution cooperatives include more than 64,000 people (16%) above the age of 65 and more than 48,000 people (12%) whose annual household income is below the federal poverty level. Because Sunflower, Mid-Kansas, and their distribution cooperative members operate on a not-for-profit basis, the cost of compliance with CSAPR flows directly through to our customers.

5. The generation assets of Sunflower consist of a pulverized coal unit, Holcomb 1 (H1), located near Holcomb, Kansas which has a nominal capacity of 362 MW and four natural gas-fired units totaling 217 MW at the Garden City Station including the 98 MW S2 unit, the 15 MW S3 unit, the 51 MW S4 unit, and the 53 MW S5 unit located in Garden City. Sunflower also operates the electric business of Mid-Kansas. Mid-Kansas owns five generation facilities all of which are natural gas-fired: the 147 MW Fort Dodge 4 (FD4) unit (f/k/a Judson Large) at Dodge City; the 99 MW Great Bend 3 (GB3) unit (f/k/a Arthur Mullergren) located near Great Bend; the 68 MW Clifton 1 (CL1) unit located at Clifton Station near Concordia; and the 61 MW Cimarron River 1 (CR1) unit and the 16 MW Cimarron River 2 (CR2) unit located at Cimarron River Station near Liberal. In addition, Sunflower receives available energy from Phase I of the Smoky Hill Wind Project (SHWP) (up to 50 MW/hr), and Mid-Kansas obtains available energy from the Gray County Wind Farm (GCWF) (up to 51 MW/hr) and from Phase II of the SHWP (up to 24 MW/hr). Mid-Kansas also presently receives energy through a 174 MW Participation Power Agreement (PPA) from the 3-unit coal-fired 2,175 MW Jeffrey Energy Center operated by Westar Energy, Inc., located near St. Marys, Kansas.

However, the Jeffrey PPA expires on January 3, 2019. Without the power associated with the Jeffrey PPA, Mid-Kansas would not have sufficient power to meet its load requirements.

6. H1, the single coal unit operated by Sunflower, has extensive pollution control devices in place including low NO_X burners, a spray dry atomizing (dry) scrubber, and a fabric filter. These control systems serve to substantially limit SO_2, NO_X, and particulate emissions, which are the focus of CSAPR.

7. As ultimately issued however, CSAPR imposes extremely near-term requirements for Kansas (in 2012 and 2014) to reduce annual emissions of nitrogen dioxide (NO_X) and sulfur dioxide (SO_2). EPA also proposes to require Kansas utilities to reduce NO_X emissions during the "ozone-season" (a five month period from May through September). Though not yet final, under this proposal, Kansas will be required to offset its ozone-season NO_X emissions with additional reductions or allowances for the 2012 ozone-season. The scope and impact of these additional requirements cannot be analyzed until they are finalized, but they will undoubtedly exacerbate the already untenable situation resulting from CSAPR.

8. As explained in more detail below, if implemented as written, CSAPR will significantly undermine the reliability of the electricity transmission and distribution system, substantially increase the cost of providing electric energy to Sunflower and Mid-Kansas member owner families in central and western Kansas and there is very real risk Sunflower and Mid-Kansas, and other Kansas utilities, will simply not be able to lawfully meet both the needs of its customers and comply with the rule. Preliminary modeling by the Southwest Power Pool (SPP) indicates the rule will likely cause voltage reductions in southwest Kansas, a significant part of Sunflower's and Mid-Kansas' service territory, and in central and south-central Kansas which includes the Wichita metropolitan area, the most populous city in the state (as well as in south central Texas and the north Texas panhandle). Under very predictable scenarios, the resulting low voltage could lead to electricity blackouts.

9. The Administrator of the Environmental Protection Agency (EPA) signed the final CSAPR on July 6, 2011, 76 Fed. Reg. 48208 (August 8, 2011); the rule was published in the *Federal Register* on August 8, 2011, and is effective January 1, 2012. As originally proposed, the rule was known as the "Clean Air Transport Rule" (CATR) (July 2010). The rule replaces the Clean Air Interstate Rule (CAIR) that was issued in 2005. CAIR was overturned in court, but remains in place until CSAPR goes into effect on January 1, 2012.

10. Even though the CAIR rule was eventually overturned by court action, it had substantial carry over effect in the states where it applied. Utilities in the states covered by CAIR had already taken actions to commence projects designed to address the more stringent emission levels under CAIR. Even though CAIR was vacated, those projects, some of them begun as early as 2005, continued because the states and utilities affected knew that a new rule would eventually be imposed requiring more stringent emission controls for SO_2 and NO_X. Those projects included the installation of current generation low NO_X burners, overfire air systems, and selective catalytic reactors for reducing NO_X emissions and scrubbers for reducing SO_2 emissions. Also, an allowance trading program was established under CAIR for the affected states to assure that utility plants did not exceed the emission budgets established by EPA and utilities constructed new control systems in reliance on their ability to market any excess allowances they had resulting from the new lower emissions. Many of these pollution control projects were completed in 2010 – the last of them will conclude this fall.

11. However, the state of Kansas was <u>not</u> included in the CAIR rule, and therefore Kansas utilities, as well as those in other non-CAIR states, did not plan for nor did they install the long-term, large-scale pollution control projects that were planned and installed in the CAIR states.

12. Sunflower and Mid-Kansas <u>were not required</u> to reduce emissions in the CATR rule as proposed in July 2010. The NO_X budgets reflected in the rule initially proposed by EPA demonstrate that no reductions would be required at any Sunflower or Mid-Kansas coal or gas-fired facilities However, EPA made

significant changes in the rule when it was finalized and published in August of 2011. Under the rule, Sunflower will receive NO_X allowances adequate to generate only about 50% of its energy requirements in 2012 (Phase I), less than five months after the rule became final. The 2010 average NO_X emission rate for Sunflower and Mid-Kansas resources was about 0.30 lb/mmBtu. The 2012 (Phase I) allowances allocated to Sunflower support an average NO_X emission rate of about 0.16 lb/mmBtu. The even lower Phase II allocations effective in 2014 equate to an allowable emission rate of just over 0.13 lb/mmBtu. The table below illustrates the differences in the emissions allowed under the rule as proposed and the limits applicable under the final rule issued. The changes are striking.

SIX YEARS OF ADVANCING EPA NO_X REGULATIONS

	CAIR - March 2005		Rule Proposed CATR - July 2010		Rule Issued CSAPR - July 2011			
	Annual NO_X Allocation	Ozone Season NO_X Allocation	Annual NO_X Allocation	Ozone Season NO_X Allocation	NO_X Annual Allocation 2012 (tons)	NO_X Summer Allocation 2012 (tons)[1]	NO_X Annual Allocation 2014 (tons)	NO_X Summer Allocation 2014 (tons)[1]
Sunflower/Mid-Kansas Allocations	N/A	N/A	5,164	2,321	2,759	1,255	2,294	1,018
Sunflower/Mid-Kansas 2009 Actual Emissions	N/A	N/A	5,010	2,292	5,010	2,292	5,010	2,293
Allocation Balance	N/A	N/A	154	29	-2,251	-1,037	-2,716	-1,275
% Reduction Required	N/A	N/A	0	0	-45%	-45%	-54%	-56%

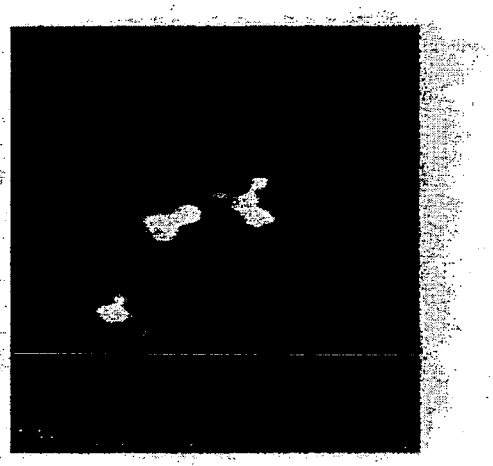
13. Project engineering, permitting, vendor selection, manufacture and delivery, and installation of projects to reduce emissions generally take anywhere from 18 to 48 months. The industrial Midwestern and Southeastern states, as to which the CAIR rule applied, have been working on similar projects since 2005. They had advance notice and were well ahead of the game when the final CSPAR rule was issued. Kansas utilities however, because the CAIR rule did not even apply to them, did not. The imposition of such a short compliance schedule on utilities within states that had absolutely no meaningful advance notice of such requirements is arbitrary and unjustifiable.

14. Sunflower is a member of the Southwest Power Pool (SPP). The SPP is a Regional Transmission Organization (RTO), mandated by the Federal Energy Regulatory Commission (FERC) to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity in an eight-state region in the middle of the United States. As a Regional Entity of the North American Electric Reliability Corporation, SPP oversees enforcement and development of reliability standards.
15. SPP engages in regular planning to ensure reliable operation of the system. The SPP transmission planning process is described in Attachment O of the SPP Open Access Transmission Tariff and utilizes three planning horizons. The Near Term Assessment is conducted annually and generally looks at time horizon of three to five years. SPP long range transmission planning is conducted over a three-year planning cycle with a 20-year assessment being conducted during the first half of the three year cycle and a 10-year assessment conducted in the second half of the three year cycle. This open and transparent planning process developed by the SPP stakeholders and approved by FERC is utilized to assure that the type of incremental changes in generation and transmission resources that utilities normally make are sufficient to meet reliability requirements.
16. The requirements of CSAPR, which go into effect in January of 2012, are being implemented much too quickly to be adequately studied by SPP and accommodated into the SPP's normal planning process. Indeed, the SPP has only recently begun studying the impacts CSAPR will have on the reliable operation of the SPP system, because the rule was only recently issued.
17. EPA's final CSAPR rule and its precipitous effective date do not allow sufficient time to conduct even a short-term study by the SPP, a process designed to allow sufficient time to plan how to accommodate those changes. CSAPR, at least for Kansas, imposes a dramatic shift in operating resources that will lead to a significant re-dispatch of the system as compared to the current dispatch plan. In fact, the Sunflower and Mid-Kansas resources identified by EPA to be dispatched in those years include substantial operation of the GB3, H1, and S3

units. The CSAPR dispatch assumptions make little sense from either an economic or a reliability perspective.

18. CSAPR allowances are only adequate to support a 50% capacity factor on H1, while historical capacity factors are consistently above 80%. The CSAPR dispatch assumptions are the LEAST likely generation scenario that would actually be employed absent CSAPR. Natural gas prices make several of the gas-fired units the last resources likely to be dispatched. S3 is a small, simple-cycle combustion turbine with one of the highest heat rates of any unit in the system; it is also one of the oldest units operated for Sunflower and Mid-Kansas and would likely require substantial maintenance if such a duty-cycle were to be assigned to it. CSAPR, under present circumstances, thus has a radical and unplanned effect on Sunflower's and Mid-Kansas' systems, as well as the systems of other Kansas utilities, and indeed on the entire SPP.
19. Like the Kansas utilities that had no meaningful prior warning they would be subject to the new rule enabling them to plan for it, SPP would have long-ago been working on this dispatch model in the real-world of system reliability.
20. Nonetheless, given the urgency of the situation and the unanticipated impact the new rule will have on all Kansas generation sources, SPP has begun assessing the reliability impacts of the CSAPR utilizing EPA's generation deployment model under CSAPR. The preliminary results suggest that in the summer of 2012 there will be significant degradation of voltage levels in southwest and south central Kansas and the north Texas panhandle, and these conditions could cause various blackout conditions to occur.

21. The image at right is taken from the report issued by SPP on September 9, 2011, giving their initial assessment of the impact of the restrictions imposed under CSAPR. It reflects the areas where voltage is predicted to be at levels below the 95% required under its regulations to assure reliability under N-1 transmission conditions. Kansas will be severely impacted based on the results of the preliminary study by SPP.



22. As noted above, large portions of the Sunflower and Mid-Kansas service territory in southwest Kansas is severely impacted. The large "blot" in the central portion of the state includes Wichita, Hutchinson and Salina, Kansas and surrounding areas. Attached hereto and incorporated herein by reference is a copy of the letter posted to Lisa Jackson, Administrator of EPA on September 20, 2011, which explains in detail the impact implementation of CSAPR will have not only on utilities like Sunflower and Mid-Kansas but on the whole state and the entire grid for which it is responsible.
23. Thus far, the SPP computers have not been able to solve the approximately 50,000 simultaneous equations necessary to hold the electricity grid model together given the effects of CSAPR. The SPP continues to study the reliability effects of CSAPR and will hopefully have more definitive information in the near future. If the preliminary analysis holds true, Sunflower, Mid-Kansas, and most other Kansas utilities will likely be caught in a proverbial "Catch-22:" they can either maintain system reliability and violate EPA mandates and then be subject to EPA civil penalties and sanctions or, they can comply with EPA mandates and risk system reliability and face NERC and FERC penalties and sanctions. Either way, electric customers will bear the inevitable and substantially increased costs associated with either outcome.

24. Moreover, Sunflower believes EPA's process in promulgating this rule was both legally and technically flawed. Because EPA elected to change its modeling program in the middle of the rulemaking process, Kansas suddenly became subject to the significant and potentially unachievable near-term emission reduction requirements with virtually no advance notice. More disconcerting is the fact that the changes imposed in the rule are based on a new modeling program which EPA has designated as proprietary. As a result Sunflower and other affected utilities and states are unable to determine the exact basis underlying the emission reduction requirements imposed. This lack of transparency is a matter of genuine concern and prevents the proper review and vetting of the conclusions reached. Although Sunflower and Mid-Kansas have access to the differing assumptions and data EPA used in the modeling used for the final rule as compared to those used when the rule was initially proposed, we cannot track those changes through the model to see exactly why those changed assumptions resulted in the final NO_x budgets which reduced allowable emissions by half.

25. Further, the rule, at least as it relates to Kansas, is based on some false premises. The EPA modeling data set assumes the downwind area that is supposedly affected by Kansas' ozone-season emissions is in "nonattainment". The EPA air quality modeling suggests that Kansas emissions will cause or contribute to a Holland, Michigan (Allegan County) violation of the 8-hour ozone NAAQS. Yet, actual, real-world monitoring data show this specific area is in fact in "attainment." The distinction is critical and is the underlying basis for the decision to include Kansas in the final rule. In fact, the Michigan DNRE petitioned EPA on August 2, 2011, to move Allegan County to an "attainment" classification. The required demonstration concludes that current and future expected ozone air quality, based upon actions taken in Michigan, will meet both the 1-hour and 8-hour ozone NAAQS. Thus, EPA's model, which concludes that Allegan County is in non-attainment, does not reflect current real-world conditions.

26. Further, the assumptions EPA used to estimate Kansas emissions are based upon actual emissions that occurred from 2007 through 2009 and do not take into consideration the substantial emission reductions that have already been or will be achieved by 2012 and 2014 because of emission control projects already completed or in the pipeline. Those figures for 2010 already show substantially lower emissions. If these emission reductions from Kansas sources were considered, the modeled impact on the Allegan County, Michigan receptor would almost certainly be less than the 1% threshold adopted by EPA for significance.

27. Notwithstanding EPA's assertions to the contrary, meeting CSAPR requirements on such short notice may not even be achievable and will in any event be extremely costly. EPA has overstated the ability of utilities like Sunflower and Mid-Kansas to comply with the rule. EPA has suggested that utilities can comply with the rule by installing new control technology, by relying more on natural gas, by allowance trading, and by purchasing electricity from others. Yet none of these options is truly available given the extremely short compliance schedule.

28. The time-frame for construction of emission control technologies is not adequate. Obviously, for systems that do not have pollution control projects nearing completion as a result of CAIR, there is no possibility of constructing new pollution control devices by the end of this year or even by 2014 for units requiring the installation of scrubbers or similar post combustion technology. In addition to construction times, nearly all of these projects will require the issuance of a PSD construction permit prior to commencing construction; failure to secure such a permit is a criminal offense under the PSD permit program.

29. Sunflower has been engaged in such a process since early 2010, intending to install a new generation low-NO_X burner and overfire air system at its H1 unit in the fall of 2013. Because of the pre-existing plan, Sunflower already had a PSD permit application submitted in Mid-2011, but did not expect a permit to be issued until the spring of 2012 (the typical application to issuance cycle is often close to a year). Sunflower expected to issue contracts for manufacture in early

summer 2012 and to have the installation completed by the fall of 2013. However, based on the final CSAPR, Sunflower issued a letter of intent so as to commence engineering and manufacture of the burner components in August of 2011 (a year ahead of schedule) and has rescheduled its planned maintenance outage in the fall of 2011 to January 2012 to install the new burners , effectively advancing the project schedule by over 18 months. These changes were not without consequence; Sunflower expects to pay a 20 to 25% premium for the components. The costs associated with the accelerated project are expected to run approximately $14 million. Sunflower was uniquely fortunate in this respect. As noted however, for other Kansas utilities requiring more capital-intensive projects such as selective catalytic reactors or scrubber installations to address the constraints imposed in the new rule, it is simply impossible for them to be completed in time to meet even the Phase II requirements in 2014 much less the Phase I requirements effective in a few short months. It is not just "their problem." Their inability to comply affects all generation and transmission sources in the state.

30. New natural-gas based resources cannot be brought on line quickly enough. In the real world, achieving reductions by bringing new resources on line in such a short time-frame, unless such projects were already in process, simply cannot be done by 2012 or 2014.

31. Allowance trades within Kansas are inadequate for utilities. CSAPR authorizes intrastate trading of CSAPR allowances, but that will have only a limited effect for Kansas utilities. All Kansas utilities must reduce emissions significantly. It is extremely unlikely that any of them can reduce so quickly and so significantly as to generate sufficient allowances to cover the emissions of other Kansas utilities. The numbers just do not add up.

32. The importation of up to 18% of budgeted allowances from states that have met their objectives is inadequate for Kansas. CSAPR authorizes limited interstate trading of allowances. A state can exceed its budget by up to 18% if another state with which it is authorized to trade has excess allowances. But there is good reason to believe that the trading market will not be robust, particularly by

2012 and even 2014. First, the rule is so new and its effect so little understood because of its complexity that utilities that do generate excess allowances will in all likelihood bank them for their own future use rather than trading them. Second, utilities will be particularly cautious about trading given the experience with CAIR, EPA's last foray into interstate regulation. When CAIR was overturned in court, the value of CAIR allowances was immediately reduced to near-zero and utilities which had expended vast sums to create allowances were left holding the bag. Under CSAPR, EPA is about to terminate utility accounts of both CAIR and acid rain allowances. This results in the elimination of millions of dollars in allowance values. Having seen their significant investments in CAIR allowances disappear, utilities are likely to be reluctant to jump into significant allowance-trading under CSAPR. Finally, the significant penalty provisions in the rule for states exceeding their emissions budget and which are limited in their ability to "cover" by the cap on interstate trading will have a further chilling effect on the market.

33. If, on the other hand, the market for trading allowances turns out to be viable, it will still not be without serious consequence. EPA, when it issued the final CSAPR rule, projected that SO_2 allowances would be available for purchase at about $600; that annual NO_X allowances would run $500; and ozone season NO_X allowances would cost around $1300. However, the first limited publicly disclosed contracts for allowance trades in early September 2011 have reported SO_2 prices of $2600 per allowance and annual NO_X allowances at $3500 each. These reported prices are four to seven times higher than EPA estimated for such transactions and have a direct bearing on the legitimacy of the economic analysis offered by the EPA and will have a real impact on energy costs borne by consumers. It is unreasonable for EPA to expect utilities to rely on trading in the early years of the rule to make up for their practical inability to install controls fast enough.

34. EPA's suggestion that the purchase of electricity from other providers as a viable way of meeting the allowance dilemma is not realistic, at least it is not for

utilities within the SPP.[1] Today's SPP rules require that each utility have enough capacity from electricity producing equipment, operating and connected to the grid, to meet their load and reserve requirements. Utilities may meet their capacity requirements with their owned-resources, or they may purchase firm energy (usually long-term) from other utilities. Firm purchases are necessarily associated with firm transmission paths to get the energy from the resources committed to the load being served.

35. There are currently two mechanisms for short term energy purchases in SPP. The first is short-term bilateral transactions that are typically non-firm. These transactions may be interrupted for any number of reasons, but a common one is a transmission constraint due to combined energy flows exceeding design or operating limits due to the short-term transaction. A utility may also purchase non-firm energy on an hour-by-hour basis against its capacity resources through the SPP Energy Imbalance Service (EIS) real-time energy market. It is this non-firm market that would be susceptible to price volatility as utilities move to offset their energy production to other utilities in the pool in the absence of adequate allowances to operate their owned-resources. Regardless and without delving into more details, neither of these short-term mechanisms is useful for the importation of firm power in the fashion that EPA seems to imply in their rule.

36. Short-term markets rely on offer prices determined by individual utilities on an ongoing basis. Sunflower prices all of its resources each day into the EIA market. But how does Sunflower or any other utility price the resources that it would utilize for the benefit of others' allowance shortages without absorbing the same allowance shortage itself? The net effect of these uncertainties will likely reduce the availability of short term power and will, at a minimum, greatly increase the price of electricity for all who enter such transactions. If

[1] Sunflower does not insist that all reliability pools are operated under the same structure. However, each pool operates in accordance with NERC guidelines and as approved by FERC. EPA's notion of power transactions MAY be the case in some parts of the country, but they are not within the SPP.

Sunflower's completion of the low-NO_X burner, overfire air system project is forestalled for any reason, initial projections of the additional recurring annual cost of purchased power to replace the reductions required by the rule range from $15 million to as much as $45 million, if market power is available at all considering that other utilities are similarly strained by this rule. It is literally impossible to accurately predict what the market price will be once the rule goes into effect. There is no doubt that the prices will escalate based on demand, but no one really knows how high they will go. Given the more than 100,000 customers in our service area who are either over the age of 65 and on fixed incomes or under the federal poverty level, the impact could be severe, and for some, catastrophic.

37. A long-term transaction such as a PPA, on the other hand, represents the responsible way to meet load and pool reserve obligations when a large part of the utility's load must be met with purchased power instead of power generated from its owned-resources. The current PPA between Mid-Kansas and Westar, involving the Jeffrey Energy Center supply for Mid-Kansas, is an example of such a long-term firm purchase arrangement. However, in order for a long-term power transaction to be counted as firm capacity, as presumably EPA suggests, it must have firm transmission associated with it. It is exactly the implication of the dispatch model determined by EPA that large quantities of firm energy will be transferred across the grid in satisfaction of the reduced emission outcome that is most troubling. None of this burden is now impressed onto the SPP transmission network.

38. Securing firm transmission within the SPP requires formal application, prerequisite studies by the pool, and perhaps capital improvements which must be completed before firm transmission can be acquired. This process can take 12 to 18 months to complete the application and studies and, if additional transmission needs to be constructed, could take anywhere from 3 to 10 years, dependant on the scope of facilities necessary. Clearly, it is too late for Sunflower or Mid-Kansas to acquire such a path in order to meet peak-season 2012 loads, and it is probably too late for the 2013 peak season. In fact, it is

doubtful that the planning and modeling activities associated with a SPP firm transmission decision, in light of the expected large numbers of such requests, can be successfully concluded at all. EPA's suggestion that the purchase of power from other utilities is a viable option rings hollow. It is not a clear path on which utilities can depend for complying with EPA's imposition of emission based dispatch on electricity producing resources.

39. Further, the availability of purchased power to meet the needs of Sunflower's and Mid-Kansas' customers under the EPA dispatch model is further limited by a relatively remote location. Sunflower and Mid-Kansas are situated on the very western edge of the eastern grid which results in transmission constraints not faced by other utilities. Indeed, even within the state of Kansas, the impact of CSAPR on other utilities brings into question whether Mid-Kansas will even receive the power it currently receives under the existing PPA with Westar.

40. In sum, in newly included Kansas, the imposition of CSAPR in January of 2012 will have dire and irreparable consequences on Sunflower and Mid-Kansas and its customers. The direct consequences on Sunflower and Mid-Kansas are not just cost-related. They place Sunflower, Mid-Kansas, and most of the other Kansas utilities on the horns of a dilemma–they can comply with the rule and put themselves and their customers at risk from a reliability standpoint that is in violation of the Federal requirements imposed by FERC, NERC, and SPP or, they can meet their statutory obligation to provide reliable (and affordable) service and endure the wrath of EPA. This conundrum arises out of the EPA's last minute "bait and switch" tactic using undisclosed modeling based on outdated and inaccurate assumptions. The issuance of a stay is the only plausible relief which can be given in the circumstances.

Further Declarant Sayeth Not.

Wayne E. Penrod, P.E.
Executive Manager, Environmental Policy
Sunflower Electric Power Corporation
P O Box 1020
Hays KS 67601

State of Missouri
County of Jackson

Subscribed and sworn to by Wayne E. Penrod, before the undersigned on October 5, 2011.

Notary Public

My Appointment Expires:

CYNTHIA R. BATTS
Notary Public - Notary Seal
STATE OF MISSOURI
Platte County
My Commission Expires: Mar. 31, 2015
Commission # 11493176

VERIFICATION

STATE OF KANSAS)
)ss:
COUNTY OF ELLIS)

Stuart S Lowry, being first duly sworn, deposes and says that he is the person referred to in the foregoing document entitled "Direct Testimony of Stuart S. Lowry" before the State Corporation Commission of the State of Kansas and that the statements therein were prepared by him or under his direction and are true and correct to the best of his information, knowledge and belief.

Stuart S Lowry

SUBSCRIBED AND SWORN to before me this 14 day of December, 2011.

NOTARY PUBLIC - State of Kansas
Renee' K. Braun
My Appt. Expires 4-30-2014

Renee K. Braun
Notary Public

My Appointment Expires: