

**BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**

In the Matter of the General Investigation to )  
Examine Issue Surrounding Rate Design for ) Docket No. 16-GIME-403-GIE  
Distributed Generation Customers. )

**REPLY COMMENTS OF**  
**SOUTHERN PIONEER ELECTRIC COMPANY**

COMES NOW Southern Pioneer Electric Company (“Southern Pioneer”) and pursuant to the State Corporation Commission of the State of Kansas (“Commission”) Order Opening General Investigation (“Order”) and Order Setting Procedural Schedule (“Procedural Schedule”), hereby files the following reply comments.

**I. Principles of Cost for Service and Cost Causation Apply to Distributed Generation Rates.**

1. Southern Pioneer agrees with the Citizens Utility Ratepayer Board (“CURB”), Empire District Electric Company (“Empire”), Midwest Energy, Inc. (“Midwest”), Kansas City Power and Light Company (“KCP&L”), Commission Staff, and Westar Energy, Inc. (“Westar”) that the evaluation of and design of rates for customer-owned distributed generation (“DG”) should be grounded in utility cost of service and principles of cost causation. That is, the customer should continue paying for cost of electric service for which it is still responsible. If this is not the case, costs will be unfairly shifted to other customers that cannot or choose not to install onsite DG facilities.

2. Cost causation, a long-standing principle of ratemaking, continues to be appropriate within the context of DG rates. Notably, utility rates are evaluated and established based on costs incurred by the utility to provide reliable service and do not traditionally include or attempt

to privatize externalities like possible societal benefits or costs. This includes not only general service rates, but also special program rates, such as standby service rates, that have been used for years in cases where customers self-supply all or a portion of their electrical needs. There is no compelling reason why this established cost-based methodology should be changed by the Commission.

## **II. A Value of Solar (i.e., Cost-Benefit) Study is Not Appropriate at This Time.**

3. Southern Pioneer agrees with the position advanced by KCP&L and Commission Staff that a Value of Solar (i.e., Cost-Benefit) study should not be initiated, ordered, or completed as part of this docket. The Kansas legislature has already implemented Net Metering in the state, which allows the DG customer to receive full retail value for its DG production up to its level of consumption and the utility avoided monthly system average cost of energy for net excess generation remaining at the end of each billing period. Considering the current compensation policy for DG (i.e., Net Metering), Southern Pioneer does not see a role for Value of Solar in this docket.

4. Value of Solar (a.k.a. cost-benefit) studies are very narrow, nearly always contentious, volatile, costly, and of questionable use. They are narrow in that they focus only on a specific technology (i.e., solar), and the results and assumptions must necessarily be specific to each utility. Other resources, including utility-owned renewables, are not generally given this type of treatment; and it would be bad policy to establish a separate, preferential approach to evaluating DG resources such as solar.

5. Value of Solar studies are also very controversial, as each stakeholder brings its own set of assumptions, opinions, and methodologies, which have significant impacts on the range of results. For example, study results from around the U.S. range from around 3 cents to over 30

cents per kilowatt-hour, depending on things such as: who completed the study, the purpose of the study, the timeframe over which the value is established, and whether or not externalities were included. Concerning the latter, parties nearly always disagree on what costs and benefits should be included; and externalities can account for over one-half of the total value.<sup>1</sup> Developing a methodology and making these calculations is very time consuming and costly, as it must be specific, or customized, for each utility.

6. Finally, the results are of questionable value, as rates are not set based upon value in Kansas or elsewhere. Likewise, DG rates should continue to be evaluated and established based upon utility cost of service. Any deviation introduces subjective assessments of “value” and possibly arbitrariness.

7. The parties, in their respective initial comments, have introduced alternatives for DG rate design that further negate the need for completing Value of Solar studies. Southern Pioneer would reference the initial comments of Commission Staff witness Mr. Glass who states, “The advantage of Commission Staff’s approach is that Commission Staff’s recommended rate design can eliminate the need for some expensive benefit-cost analysis that Commission Staff initially foresaw as necessary to set rates for distributed generation customers.”<sup>2</sup>

8. In Cromwell Environmental, Inc.’s (“Cromwell”) Initial Comments, at Para 15 it states, “Cromwell previously proffered three separate state solar studies that reached strikingly different results, primarily because of the differing usage characteristics of solar customers within those states.” This confirms a couple of Southern Pioneer’s concerns over the

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<sup>1</sup> Norris, B.L., P.M. Gruenhagen, et al., “Maine Distributed Solar Valuation Study”, Presented to The Joint Standing Committee on Energy, Utilities, and Technology, 127<sup>th</sup> Maine Legislature, March 1, 2015. The referenced study concluded that distributed solar is responsible for societal benefits of 9.3 cents per kWh and avoided market costs of 9.0 cents per kWh in Year 1.

<sup>2</sup> Docket No. 16-GIME-403-GIE, March 17, 2017, Notice of Filing Staff’s Verified Initial Comments, Page 4, Para 8.

Commission conducting or ordering the completion of Value of Solar studies in this docket. First, it is generally accepted by everyone that such studies are volatile and produce substantially different results. Second, at least in some cases, the reason for the “strikingly different results” cited by Cromwell is not due to differing usage characteristics of solar customers at all. Rather, it is usually the result of whether or not externalities were included and, if so, at what level. This issue alone can more than double the resulting “value” as is evidenced in the previously referenced Maine Study.

9. Cromwell at Para 16 states, “Each study concluded that the rate of compensation to the solar PV customers was essential to the viability of solar development.” Southern Pioneer submits that the purpose of this docket is not to ensure the “viability of solar development,” but to allow for robust stakeholder discussion, “which will result in just and reasonable rates for DG customers.”

10. Finally, in its Summary and Conclusions, Para 19, Cromwell states, “The known diversity coupled with limited data to explain usage patterns prevent reaching reliable conclusions about costs and benefits of distributed solar generation.” Southern Pioneer would tend to agree with this statement, which supports its previous comments on why a Value of Solar study should not be conducted as part of this docket.

11. In its Initial Comments, Para 8, United Wind, Inc. (“UW”) states, “UW sees tremendous value in appreciating where along the distribution network current capacity exists to install DG systems, and where installation would be costlier or require upgrades. It is obvious on its face that with greater knowledge of the grid constraints, developers can focus their efforts in areas of the utility territory where it best serves the utility and only explore more challenging locations once the low hanging fruit has been picked.”

12. Various “hosting” studies have been done in parts of the country in an attempt to produce and transparently provide the type of information UW desires. This type of information would certainly help ensure DG is integrated with the grid in a way that provides the most benefit. Unfortunately, these studies have proven to be very costly and difficult to keep current, as feeder loading and DG production is continually, and unpredictably, changing. Southern Pioneer is not prepared or staffed to undertake the types of studies UW proposes which fall outside of its main purpose which is to provide safe and reliable service at a reasonable price. We further question whether any Kansas utility is prepared, or should even be expected, to take on this type of initiative which could layer substantial costs on ratepayers.

13. UW also contends in Para 10 that, “[b]y off-setting peak load, distributed wind reduces the need for purchase of high cost electricity at peak periods. These avoided costs over the long term will provide net benefits to all customers.” First, because wind is not dispatchable and is intermittent, it cannot be relied upon to reduce the need for purchase of high cost electricity at peak periods. Even if it were reliably true, there would be no long-term benefits provided to other customers if the utility is compensating at a retail rate (via net metering) that exceeds even this high cost electricity.

14. In Para 3, UW states, “UW sees a tremendous opportunity to deploy distributed wind and drive economic development in the state.” UW further states in that same paragraph, “UW has undergone a comprehensive analysis of the market in Kansas and has conservatively estimated that there is the opportunity to invest \$160,000,000 in hard assets in the rural and agricultural communities in the state.” Southern Pioneer has only three (3) active renewable DG customers out of 17,100 total meters. The deployment of wind and solar DG is currently very low in the State of Kansas. When the previous state of the industry and forecast for growth is

taken together, now is the ideal time to establish DG rates that make sense for Kansas and that are sustainable. Doing so could ensure that investment decisions affecting hundreds of millions of dollars (according to UW forecasts) are being made based on sound economics and are not simply creating significant stranded cost exposure for utilities, DG ratepayers, and non-DG ratepayers. Properly designed, cost-based rates can ensure the appropriate price signals are provided and rates remain fair to all ratepayers so that a healthy and economically viable wind and solar DG market has a chance to emerge from a rapidly changing environment.

15. Also in Para 10, UW states, “UW is keen on assisting on these economic development efforts, but this value should also be considered in assessing rates for distributed generation.” This seems to suggest that UW would like to see the cooperative members and/or ratepayers around the state subsidize UW’s economic development concerns so that it can take advantage of this “tremendous opportunity to deploy distributed wind” and secure its share of the “opportunity to invest \$160,000,000 in hard assets” in Kansas. This type of proposal or others that would monetize, and privatize, what are potential public benefits should clearly be dismissed by the Commission when establishing DG rates and policies.

16. If the Commission were to determine or require that Value of Solar or cost-benefit studies be conducted, Southern Pioneer re-affirms its position that 1) the studies would have a defined purpose that is grounded in assessing the avoided cost to the utilities (e.g., Commission Staff’s “market-based avoided costs” recommendation); 2) the specific load profiles, system profiles, technologies, cost structures, and avoided costs of each utility be considered; and 3) only quantifiable components of costs or benefits to the utility should be included. Southern Pioneer cannot support adoption of a Value of Solar result that relies upon other industry or

utility methodologies or calculations.<sup>3</sup>

### **III. The Commission should not predetermine a single rate structure solution**

17. In reviewing the initial comments filed by other parties, Southern Pioneer reaffirms the position taken in its initial comments that the Commission should not predefine a single rate structure approach to be used by all utilities for DG. As evident in the filed comments of the parties, there are a variety of rate structure options available; e.g., 3-part rates, increased fixed charges, and grid access charges that Southern Pioneer believes the Commission can find as reasonable for DG rate design. At this point, a singular approach has not yet emerged in the instant docket; and, thus, the DG rate design for Kansas utilities should not be restricted or limited to only one option.

18. One rate structure approach, proposed in the initial filed comments by a great majority of the parties and being evaluated and implemented around the country, is the 3-part rate consisting of a Fixed Charge, Demand Charge, and Energy Charge. In fact, no party filed opposition to this rate design in the initial comments. However, even in this rate structure, there is variation in how it would be designed and applied. For example, the demand charge could be based upon the individual customer peak load each month (i.e., non-coincident peak or “NCP”), as suggested by Westar, Sunflower Electric Power Corporation (“Sunflower”) and Mid-Kansas Electric Company, LLC (“Mid-Kansas”).<sup>4</sup> Alternatively, it could be based upon the individual customer’s load level occurring during the system peak (i.e., coincident peak or “CP”), as suggested by Commission Staff. Finally, it could be based upon the individual customer’s peak load during an on-peak time period (i.e., on-peak demand). These types of rates, in the

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<sup>3</sup> This is in contrast to KCP&L’s Initial Comments, Para 36, which suggest that the Commission could establish a DER value based upon, “Existing studies accompanied by comments to establish applicability to the Kansas jurisdiction.”

<sup>4</sup> Reference Westar’s Initial Comments, Para 41, and Sunflower and Mid-Kansas Initial Comments Para III.9.

aforementioned varieties, have been used in the electric industry for decades. They are fairer, since they more closely track the main types of costs and cost drivers in the electric industry; i.e., consumers, demand, and energy.

19. There remain outstanding issues concerning whether rate design for DG should be implemented only for DG customers or for all customers. Midwest Energy suggests that a 3-part rate design is fairer for all customers; and thus it is appropriate to implement such a rate for all customers, not just DG customers. Similarly, KCP&L identifies this approach as “a desirable, long-term objective,” but supports using a separate rate for DG in the short-term. Westar, Empire, and Commission Staff recommend applying a 3-part rate only to DG customers. Southern Pioneer does not believe there needs to be decisive action taken by the Commission on this question. There are too many unknowns at this point to make a generalized determination. For example, the decision could be affected by things like the availability of demand data, availability of production meter data, the number of DG customers, the total number of customers, the complexity of the demand charge being implemented, etc. In some situations, it would be very challenging, if not unreasonable, to separate DG customers into their own rate class.

20. Southern Pioneer suggests that the more cost-based a rate structure is, the more appropriate the rate is for a diverse ratepayer group which could eliminate the perceived need to parse out certain types of customers out into separate rate classes.

21. Cromwell comments in Para 14 of its Initial Comments on the diversity of solar customers in that they may be as diverse as non-solar customers. They also suggest that some solar customers may add load after installing DG to keep energy usage essentially the same. Southern Pioneer cannot confirm the likelihood, or frequency, of these claims being true;



however, it would assert that a rate design that decouples demand-related fixed cost recovery from volumetric energy charges tracks better with cost causation. Thus, it is a better rate design for dealing with customer load profile diversity, whether there is DG present or not.

22. Southern Pioneer continues to affirm, in agreement with Empire, that an alternative to a separate 3-part rate design for DG customers is a grid access charge for DG customers, which is based upon the DG facility technology, size, and/or production. This type of DG rate design has been approved by the AZ Commission and is in use by electric cooperatives in at least five states. It might be the best cost of service based option in a situation where a demand charge cannot be implemented due to lack of demand meter data.

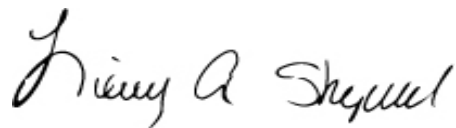
23. In its filed comments, Section V. Rural Electric Cooperatives, UW addresses Grid Access or Grid-Use Charges. UW states, “While UW can appreciate that there may be short term impacts to the grid when distributed generation adoption reaches a certain level related to the grid peak loading system wide, such pricing mechanisms should not be used prospectively and become less of a cost-recovery mechanism and more of a deterrent for members to install DG.” UW clearly is misunderstanding the purpose for a Grid Access or Grid-Use Charge. The purpose is to provide a price signal to the DG customer of what it costs to have grid access/back up while reducing cost shifting that would otherwise occur from DG to non-DG customers. It is not to collect “short term impacts to the grid when distributed generation adoption reaches a certain level.”

#### **IV. Conclusion**

24. Southern Pioneer affirms the principle that electric rates, including DG rate, in Kansas should continue to be cost-based to ensure appropriate price signals, cost recovery, and fairness. Southern Pioneer believes that 3-part rates, grid access charges, and increased fixed

charge rate structures, as proposed by various commenting parties, are cost-based approaches that will result in just and reasonable rates for DG customers. Since the applicability of these approaches can be utility specific, the Commission should not adopt a single rate structure approach to be used by all utilities. Finally, there is not a current need for Kansas utilities to conduct cost-benefit studies on DG at this time. Rather, evolving rate structures can provide cost-benefit information to DG and non-DG customers as they relate to the impact on the utility's cost of service while also ensuring just and reasonable rates.

Respectfully submitted,

A handwritten signature in black ink, reading "Lindsay A. Shepard". The signature is written in a cursive, flowing style.

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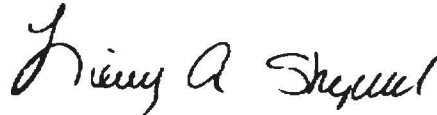
**ATTORNEY FOR SOUTHERN PIONEER  
ELECTRIC COMPANY**

**VERIFICATION**

STATE OF KANSAS            )  
                                      )  
COUNTY OF GRANT        )       ss:

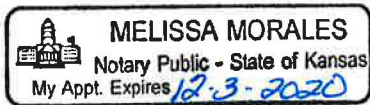
Lindsay A. Shepard, of lawful age, being first duly sworn on oath states:

That she is counsel for Southern Pioneer Electric Company; that she has read the foregoing Reply Comments and knows the contents thereof; and that the facts therein are true and correct to the best of her knowledge, information, and belief.



\_\_\_\_\_  
Lindsay A. Shepard

SUBSCRIBED AND SWORN to before me this 5th, day of May, 2017.





\_\_\_\_\_  
Notary Public

My Commission expires: Dec. 3, 2020

### **CERTIFICATE OF SERVICE**

I do hereby certify that on the 5<sup>th</sup> day of May, 2017, a true and correct copy of the above and foregoing Entry of Appearance was electronically served to all parties of record.

A handwritten signature in black ink, reading "Lindsay A. Shepard". The signature is written in a cursive, flowing style. The first name "Lindsay" is written with a large, stylized 'L'. The middle initial "A" is smaller and positioned between the first and last names. The last name "Shepard" is written with a prominent 'S' and a trailing flourish.

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Lindsay A. Shepard

**BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**

In the Matter of the General Investigation to     )  
Examine Issues Surrounding Rate Design for     ) Docket No. 16-GIME-403-GIE  
Distributed Generation Customers                     )

**AFFIDAVIT OF RICHARD J. MACKE**

STATE OF MINNESOTA     )  
   ) ss  
COUNTY OF Isanti     )

Richard J. Macke, being first duly sworn on his oath, states:

1. My name is Richard J. Macke. I am a Vice President and lead the Economics, Rates, and Business Planning Department at Power System Engineering, Inc. ("PSE"), an electric utility consulting firm headquartered at 1532 W. Broadway, Madison, Wisconsin 53713. My business address is 10710 Town Square Drive NE, Suite 201, Minneapolis, Minnesota 55449.

2. Attached hereto and made a part hereof are the Reply Comments of Southern Pioneer Electric Company ("Reply Comments"), having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have personal knowledge of the matters set forth in the Reply Comments. I hereby swear and affirm that the information contained in the Reply Comments is true and accurate to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Richard J. Macke

SUBSCRIBED AND SWORN to before me this 4th day of May, 2017.

Marilyn M. Cuellar  
Notary Public

Commission Expires: 1/31/20

