BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

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

INITIAL BRIEF OF CROMWELL ENVIRONMENTAL, INC.

COMES NOW Cromwell Environmental, Inc., by and through its attorney, and submits its Initial Brief in this docket.

INTRODUCTION

When the Commission directed the creation of this docket in its Order Approving Settlement in Docket No. 15-WSEE-115-RTS, it set forth the laudable objectives of (1) determining the costs and benefits associated with distributed generation and (2) establishing guidelines for setting rates for distributed generation customers in future rate cases. The Staff Report and Recommendation at the commencement of this docket refined these objectives to target "quantifiable" costs and benefits and to focus primarily upon residential distributed generation customers.

Cromwell joined as a party to this docket with the expectation that reasonable guidelines would be established that would benefit both solar customers and utilities by providing parameters within which future rates would be set for distributed generation customers. By default, Cromwell ended up as the only party with actual experience with distributed generation customers and installations. Despite the fact that this engagement is well beyond the scope of normal business operations of this company, Cromwell invested in full participation here, including development of factual data from its experience, in hopes that its expectation for reasonable guidelines would be achieved.

Unfortunately, the utility parties to this docket and Staff have presented the Commission with a Non-Unanimous Stipulation and Agreement that achieves none of the objectives the Commission set forth when it established the docket. In so doing the settling parties have deprived the Commission of the opportunity to develop a factual basis for evaluating DG customers, their usage characteristics, and potential rate design structures for them. The modest elements of the Stipulation and Agreement do little to establish reasonable guidelines for future distributed generation customer rates; actually the terms of the Agreement contain restrictions on rate designs that ultimately may be harmful. This Stipulation and Agreement should be rejected for the following reasons:

It fails to achieve the objectives and purposes of this generic investigation;

It does not provide clear guidelines for consideration of future rates for DG customers;

It unnecessarily restricts rate design options for DG customers; and

It is not supported by the record.

CASE HISTORY

The specific procedural details of this case are well documented. *See* Joint Motion to Approve Non Unanimous Stipulation and Agreement filed June 16, 2017. At the conclusion of filing comments, the parties conducted settlement discussions which resulted in the utility parties and Staff reaching an agreement that Cromwell, CURB, and other non-utility parties either opposed or did not participate. The Non-Unanimous Stipulation and Agreement was presented for approval June 16, 2017, and statements in support or opposition were filed June 20, 2017. Because of the generic nature of this docket, the hearings held June 27, and 28, 2017, included substantive matters raised in comments, reply comments, the Stipulation and Agreement, and statements in support or opposition to the Stipulation and Agreement. This Brief concentrates on

the Initial Comments, Reply Comments, and the testimony given during the two days of hearings.

DISCUSSION

A. The record in this proceeding demonstrates that Distributed Generation customers have utility purchasing patterns similar to typical residential customers and rebuts the notion that separate rate treatment is necessary for residential DG customers.

The premise of the Stipulation and Agreement (hereinafter cited as "S & A") is that DG customers are different than other residential customers and that DG customers don't pay their share of costs under a two-part rate. S & A, ¶9. This premise is simply contrary to evidence in the record.

The one and only "difference" between a residential customer with DG and a typical residential customer is the fact that the customer with DG will deliver excess energy produced back into the distribution system of the local utility while the typical customer merely consumes energy from the local utility. Gilliam, Tr. 399, li. 5 – 20. As the following discussion shows, the record reflects that the parties agree that because DG customers alone deliver energy back into the distribution system, there may be costs and/or benefits that accrue. See Staff Initial Comments, ¶¶ 3 – 6. However, there is no evidence in the record of a quantified value of any such costs and benefits, or indeed if such costs and benefits are significant. In fact, the record shows that DG residential customers are only a very small part of the residential class and that their usage of utility service is actually indistinguishable from other residential customers.

1. DG residential customers are a very small group.

The Kansas utility with the largest number of DG customers is Westar, but even with this utility, the number of customers is very small. At the time of hearing, there were only 615 residential customers with DG installations representing a small fraction of the total residential

customers state-wide. Martin, Tr. 82, li. 20 – 21. Thirty-two of these DG customers utilized parallel generation with the balance opting for net metering. Martin, Tr.109. li. 1. This small number of customers imposes a combined demand of only 4000 kW which is $8/10^{th}$ of 1% of the total residential demand. Martin, Tr. 83, li. 4 – 17. Similarly, there are only 132 residential DG customers on the KCPL Kansas system; 7 customers on the Empire Kansas system; and 21 operating residential DG customers on the Midwest system. Lutz, Tr.147, li. 20 – 23; Eichman, Tr. 296, li.19 - 24; Parke, Tr.309, li. 24 - 25. With the small number of customers relative to the residential class, it is not surprising that the data available is limited. There is certainly insufficient data and evidence in the record for this proceeding to determine whether DG customers impose significantly different costs on the utility system or provide benefits. See Comments of Climate Energy Project In Opposition to Non-Unanimous Settlement, p. 7, li. 8 – 15.

2. **There have been no costs or benefits proven in the record to be attributable to DG customers.**

Through the course of this proceeding, the parties identified a number of *potential* costs and benefits that might result from the proliferation of DG residential usage. The potential costs identified include: planning costs; costs of pulling back generation; distributed capacity costs; costs of managing load flow; costs resulting from increased volatility of usage; and grid reliability costs. Staff Report and Recommendation, p. 5 – 6; Westar Initial Comments, Faruqui Affidavit, p. 9. The possible benefits identified include: avoided energy costs; avoided capacity costs; avoided transmission and distributive costs, and avoided auxiliary and capacity resource requirements. See, e.g., Glass, Tr. 331, li. 5 – 9. Although several parties speculated in initial and reply comments that these costs and benefits might arise, during the hearing the record

established convincingly that there is no current data or evidence upon which to conclude such costs and benefits are real.

On the cost side of the equation, there is no information that indicates that any additional planning costs have been incurred to serve residential DG customers. Martin, Tr. 104, li. 14 – 16. The costs of "pulling back generation" are not significant now and have not been determined. Martin, Tr. 105, li. 20 – 24. There has been no measurement or valuation of any costs of managing load flow that might be related to residential DG customers. Martin, Tr. 115, li. 23 – p.116, li. 1. There has been no analysis of distributed capacity costs. Faruqui, Tr. 196, li. 12 – 14. There is no information on grid reliability costs. Martin, Tr. 100, li. 20 – p. 101, li.11. Finally, when acknowledging that there is no evidence now of increased usage volatility, Witness Martin's comment can rightly be applied to the state of the full record as to potential costs:

"I don't think we have a specific cost for that. ***We just know it's there.***"

Martin, Tr. 102, li. 6 – 10. [Emphasis added.]

On the benefit side of the equation, Witness Glass acknowledged that all five of the potential benefits he recommends for consideration in establishing rates for residential DG customers were only mentioned and not studied in this docket. Glass, Tr. 331. None of these benefits have been quantified although Dr. Glass readily concedes they are measurable. *Id.*

Although costs and benefits of distributed generation are agreed by all parties to be important factors in determining rates, the record in this case has not produced a factual basis for quantifying costs or benefits of distributed generation.

3. DG residential customer utility service usage is consistent with usage of other residential customers.

In stark contrast to the minimal record related to costs and benefits of DG customers, the record contains substantial evidence that DG customer usage of utility services[1] is very much like that of typical residential customers in terms of actual demand and kwh purchased. On the Westar system, the typical residential customer has a demand of 5 – 6 kW with monthly energy purchases of 900 kwh [10,800kwh/yr]. Martin, Tr. 86, li. 14 – 18. The residential customer with DG imposes an average demand of 7 kw. Faruqui, Tr.193, li. 8 - 15. From recent Westar usage data, Witness Gilliam calculated that the average usage of utility services for DG residential customers ranges from 9967 kwh/yr. to 10,410 kwh/yr [830 – 868 kwh/mo.]. Gilliam, Comments of Climate Energy Project Addressing Non-Unanimous Settlement, p. 12, li. 7. These figures for DG customers are nearly identical to the typical residential averages. See discussion at page 7, *infra.* In a similar vein, the examples of actual customers presented in the Initial Comments of Cromwell demonstrate the even though there is significant diversity of utility purchases among DG residential customers, the range of purchases is nevertheless within the range of purchases customary for the residential class. Cromwell Initial Comments, p. 3 – 6. The evidence in the record demonstrates that DG customers' utility purchasing patterns are no different than residential customers, and that there is no factual basis at this time for establishing a different rate treatment for DG customers.

The proponents of rate change for DG customers wave the red flag that DG customers use less energy and therefore are not paying for the full cost of serving them. Westar Initial

[1] During the hearing efforts were made to distinguish total consumption by the customer behind the meter in order to determine the total energy consumed, including energy produced through the DG installation. See cross examination of Cromwell, Tr., 375 – 380. This effort is a red herring. The only relevant information for purposes of utility rate making is information related to the customer's purchases from, and deliveries to the utility distribution system. For purposes of setting utility rates, the consideration of terms such as "usage," "consumption," and "purchases" should be limited to transactions between customer and utility, not upon energy produced and consumed directly by the DG customer behind the meter.

Comments, ¶ 21; Faruqui Affidavit, p. 6, Fig. 3. However, the record in this case demonstrates that DG customers are paying their allocated share ***and more***. As developed during the cross examination of witness Martin, the cost of serving a typical residential customer is $103/month. Martin, Tr. 84, li. 8 – 11. In order to collect this amount, the customer must purchase from Westar at least 750 kwh/month. Martin, Tr. 86, li. 1 – 5. Put another way, customers who purchase more than 750 kwh pay their full cost of service; those who purchase less do not pay the full cost of serving them. However, as discussed in the preceding paragraph of this brief, DG customer averages are right in line with the residential averages, and DG customer consumption—at roughly 850 kwh/month—is above the amount needed to compensate the utility its full costs of residential service. The evidence again clearly shows that DG customers are paying their full cost of service, even where they are reducing their purchases from the utility. While it may be said that some DG customers are purchasing less electricity than the minimum necessary to cover Westar's full fixed cost of serving them, the averages are fully in line with the residential class. As witness Martin agreed, some differences occur among the residential class, but as long as the averages of the class work, the differences are acceptable. Martin, Tr. 86, li. 24 – 87, li. 12.

The proponents of rate change also wave the red flag of "cross subsidization," but the evidence reveals this claim is baseless. First, the average DG customer consumption is right at the typical residential customer average. While some DG customers at the low end of the range are below the 750 kwh/month threshold, there are other DG customers above that threshold that produce an average that fully compensates the utility and contributes a small additional amount to "subsidize" other residential customers. Based upon the data available, it is the DG customers who support others rather than vice versa.

Second, this evidence illustrates that the utilities' complaints are really with the current two-part rates and not with DG customers. Under a two-part rate, as usage declines for any reason– energy conservation, distributed generation, vacation,— the utility is at risk to collect fewer fixed costs. In the case of the Westar illustration, if the total purchases decline below750 kwh/month, the utility may not collect its full fixed costs. This inequity will only be exacerbated with a three-part rate like that used by Westar for purposes of illustration in this docket. Under the two-part rate two residential customers with identical kwh usage will pay the same amount for utility services, including an equal amount for fixed costs. However, under the three-part rate, two residential customers with identical usage will not pay identical rates and likely will differing amounts for fixed costs. In reality, the customer who invests in energy reducing measures of any kind will likely pay more for utility services under a three-part rate even though that customer is using less energy than before the investment.

The late filings of Climate Energy Project and Westar began to delve into the data needed to fully assess the impact of residential DG customers on utility costs and benefits. In response to the analysis of Witness Gilliam, Westar presented an analysis by Dr. Faruqui of limited data from DG customers on the Westar system.[2] Witness Gilliam observes that the data is still an incomplete, small sample, but notes that if properly expanded, could form the basis for sound decision making. Reply Comments of Climate Energy Project, Attachment A, ¶ 34, p. 21 – 22. Apparently, the information would not have been presented by Westar, and it was only when faced with a competing analysis that Westar chose to consider the data. Again this is the information that should have been the subject of this docket.

[2] The timing and subject matter of this presentation should be noted. The information in the Dr. Faruqui response is the very usage data that was supposed to be the subject of this proceeding. The response of Dr. Faruqui was not even considered by Westar until the eleventh hour after it became apparent that another party was equipped to analyze the data. The presentation illustrates that relevant data can be developed and points toward the merit of continuing the investigation started in the docket.

As for the substance of Dr. Faruqui's analysis, it concludes that DG customers are purchasing 49% less energy from Westar. Tr. 194, li. 22 – 195, li.12. This calculation makes for an interesting comparison to the initial Affidavit of Dr. Faruqui where he suggests reductions in purchases from Westar ranging for 61 – 98%. Faruqui Affidavit, p. 22, footnote 34. The difference between Dr. Faruqui's projections and actual experience demonstrates the obvious value in preparing Kansas-specific data and analysis, since the results of Kansas data can differ widely from projections based on other jurisdictions. It also must be noted that since the actual results show much less reduction in purchases of energy in the Westar experience, the fears and concerns raised Westar and other parties about the alleged horrors of distributed generation are likely to be similarly overstated. Finally, when the finding that DG customers reduction in purchases by 49% are combined with Dr. Faruqui's previous observations that DG customers are higher income larger users of electricity (Faruqui Initial Affidavit, Table 1, p. 9), it is apparent that even after the reduced electric purchases observed by Dr. Faruqui, the results are that larger residential users are reducing purchases but only to a level that is within the customary range of typical residential customers. DG customers are still well within the normal range of residential customers of Westar.

The record demonstrates that there is no current problem presented by DG residential customers. They are paying their full measure of costs and their usage characteristics fall squarely within the normal range of residential customer usage. DG customers are still a very small fraction of the total customer base in Kansas; this fraction is not large enough to cause a significant impact on utility revenues. In this context, the Stipulation and Agreement is no more than a solution in search of problem.

B. The Stipulation and Agreement is not supported by evidence in the record.

The absence of a problem to be solved perhaps explains why the Stipulation and Agreement contains very little policy guidance, focusing instead on a handful of normative statements that tend to restrict the Commission's options going forward. The Stipulation and Agreement must be evaluated in light of the purpose of this investigation and accord with the record that has been developed. From this view the Stipulation and Agreement fails to address the issues identified by the Commission when it established this record and the Agreement is not supported by evidence in the record.

1. The Settlement fails to address alleged DG costs.

In its Report and Recommendation, Staff identified its concerns over three costs allegedly imposed by the existence of DG customers. The first concern was over costs that may result when DG customers use the utility as a backup. Staff Report and Recommendation, p. 5. Despite this purported concern, there was no development of a record in this docket as to what these costs may be or what impact they may have upon utility revenues. Glass, Tr. 320, li. 17 – 321, li. 4. More significantly, the Stipulation and Agreement fails to address this Staff concern. Glass, Tr. 319, li. 17 – 19. Instead, the Settlement calls on utilities to present this cost as part of a cost of service study in future rate cases. Glass, Tr. 319, li.20 – 320, li. 12. Rather than attempt in this docket to address Staff's concern over the costs of the use of the utility as a back-up, the Settlement pushes this effort off to some future rate case. Procrastination on this issue has the additional failing of running afoul of Staff's stated desire to avoid competing cost studies. Staff Initial Comments, p. 6, ¶ 12. Under the Stipulation and Agreement, the utility will come forward with a cost of service study that other parties could rebut through their own study. This result looks like the competing studies that Staff wants to avoid. Of course neither Staff Witness

Glass nor Westar Witness Martin would commit to the participation of intervening parties in future rate cases. Thus the assertion that there will be robust consideration of alternatives is either an empty promise or the kind of adverse conflict of cost of service studies that Staff wanted to avoid.

The second cost concern identified by Staff in its Report and Recommendation was the cost of unpredictability that DG customers allegedly add to the system. Staff Report and Recommendation, p. 5. There was no determination in this docket of these costs. Glass, Tr. 321, li. 21 – 322, li.7. There is no mention in the Stipulation and Agreement of how such costs are to be evaluated.

Staff identified a third potential cost in its Report and Recommendation: grid security. By this Staff means the threat of interference through the internet that might result in additional security costs to the utility. Glass, Tr. 322, li. 11 – 20. There was no record developed on this concern and it is not mentioned in the Stipulation and Agreement. *Id.*

In addition to alleged costs, Staff raised concerns over specific rate design issues to be addressed as DG customers are added to the system. One such concern was whether coincident or non-coincident peak should be used for determining demand for DG customers in the event a three-part rate is adopted. Staff Report and Recommendation, p. 6. As with the costs issues identified by Staff, this concern on peak demand calculation was not addressed by the record in this docket and the Stipulation and Agreement is silent on the topic. Glass, Tr. 324, li. 6 – 19.

Similarly, Staff originally expressed concerns about how a demand rate would be calculated for DG customers, but that concern was not addressed by the record prepared in this docket nor by the Stipulation and Agreement. Glass, Tr. 324, li. 20 – 325, li. 7.

Thus the review of the questions and concerns expressed by Staff at the initiation of this docket reveals that questions have not been addressed in the record and that the concerns are not addressed by the settlement.

2. The Settlement fails to account for DG benefits.

Staff also identified potential benefits of DG customers that could have been studied in this docket, but were not. These benefits were refined in Staff's Initial Comments where Staff recommends that five benefits be considered: avoided energy costs; avoided capacity costs; avoided auxiliary and capacity reserve requirements; avoided transmission costs; and avoided distribution costs. Staff Initial Comments, p. 13; Glass, Tr. 331, li. 5 – 9. None of these benefits are quantified in the record of this docket, and the Settlement is silent as to their nature and inclusion in future cases. In fact, the Stipulation and Agreement only states that additional items such as benefits will be included in cost of service studies if ordered by the Commission. S & A, ¶ 14. It should be noted that both witnesses Martin and Glass indicated an expectation that such benefits would be included in future cost of service studies. Martin, Tr. 106 – 107; Glass, Tr. 328, li. 22 – 329, li.4. However, this expectation must be tempered by the language of the Stipulation and Agreement that requires a Commission Order before such benefits would be included in a future cost of service study. S & A, ¶ 14.

3. The Settlement unduly restricts rate design options.

A final infirmity with the Stipulation and Agreement rests in the subtle suggestions for rate design that appear benign but which hold the potential of charging for electric service to DG customers at prices that are economically infeasible. At first glance, the Stipulation and Agreement merely provides that a separate customer class shall be established for residential DG customers and that utilities may request certain rate treatment for this class in future rate cases.

S & A ¶¶9, 11. As discussed above, the record does not support the characterization of DG residential customers as significantly different from the residential customer class, and the evidence actually rebuts such characterizations. More ominous is the suggestion for rate design contained in paragraph 11 of the Stipulation and Agreement. There the specific three-part rate design with demand charge and/or a grid charge are specifically mentioned as "appropriate for residential private DG customers to better recover the costs of service to that class...." This language creates a preference for rate designs that have not been even fully considered here, much less shown to be a "better" mechanism for recovering costs. If anything, the record shows that DG customers under existing two-part rates are already paying more than the costs needed from a typical residential customer.

One justification offered by the settling parties for the settlement is that a cost of service study will be presented in future rate cases to assure rates are cost based. S & A, ¶ 13. However, there is an inherent deficiency in reliance upon traditional cost of service studies to capture the costs and benefits associated with distributed generation. The problem with the traditional cost of service study is that it begins with costs determined through the test year data. While this data measures actual costs, it will not capture savings and avoided costs that may be realized through extensive distributed generation. As a result, these savings or avoided costs will be spread through the traditional cost of service approach among all customer classes and not directed at the DG customers who caused the benefit to accrue. CURB Witness Kalcic articulated the problem best:

> " To answer the question what are the net benefits of distributed generation on an electric utility system. It's a different question from what are the costs allocated to any class including a DG class upon executing a class cost of service study. Certainly different classes with different usage characteristics will receive a different portion, slice of the cost pie, but that claimed pie is determined before the utility executes its class cost of service study. In a sense, cost benefit analysis asks how big would that pie be before

> you start the cost of service study but for distribution generation on the system, would it be bigger. If it would be bigger, then having distributed generation on the system is benefiting ratepayers. If as a result of distributed generation the pie is smaller, but starting with just the pie, if it were to be bigger but for starting with just the pie would result in a distributed generation rate that did not reflect all of the benefits that distributed generation hypothetically brings to the system."

Kalcic, , Tr. 284, li. 5 – 25.

There is serious reason to question the likely results of the three-part rate proposed in the Stipulation and Agreement. First, there is the inherent difficulty of imposing demand charges on residential customers with limited capacity to control demand. Gilliam Reply Affidavit of Climate Energy Project, p 14 – 15, Tr. 415, li. 9 – 419, li. 2; Cromwell, Tr. 385, li. 22 – 386, li. 6. Although Westar attempts to argue that DG customers have a unique capacity to control demand, Dr. Faruqui concedes that even higher rates for DG customers would only stimulate a reduction in usage of 5%. Faruqui Initial Affidavit, Fig. 9, p. 24. Second, the rate impacts of the proposed "illustrative" charges would be substantial. Dr. Faruqui analyzed the potential impact and concluded that 99% of distributed solar residential customers would see an increase in their monthly bills, some by as much as $40 per month. Faruqui Initial Affidavit, Fig. 8, p. 23. Third, the natural operation of a demand–type rate is to set a base charge leaving the customer with only the option of using less energy as a means of controlling bills. Finally, experience indicates that DG customers may increase utility purchases over time resulting in the DG customer paying more than its fair share of costs. Cromwell, Tr. 377, li. 1 - 6.

There is substantial evidence in the record pointing to far reaching consequences that even relatively small changes in policy can have upon the development of distributed generation. For example, the record reveals that the two utilities operating in both Kansas and Missouri have dramatically different market penetrations of residential DG in the respective states. KCPL indicates that it has only 132 residential DG systems in Kansas compared to over 3,000 in

Missouri. Lutz, Tr. 147. Empire District Electric Company has only 7 residential DG customers in Kansas compared to over 1000 DG customers in Missouri. Eichman, Tr. 296. Witness Lutz for KCPL attributes the difference to the existence of incentives in Missouri while Kansas has none. Lutz, Tr. 147. Incentives work! On the flip side of the same coin, Kansas changed its statutes regarding billing for net metering effective July 2015. K.S.A. 66-1265. The impact of that one change has been to reduce the sizing of solar installations with a corresponding result of reducing the impact the systems have on utility operations. Gilliam Comments in Opposition to Stipulation and Agreement, Table 3, p. 11; Tr. 436, li. 12 – 437, li. 12. It is reasonable to predict that adoption of a punitive rate design structure will directly result in reduced DG installations. Conversely, states that have started with limitations on growth of installations have elected to expand the opportunities for growth each time the limitations were approached. Westar Reply Comments, ¶ 23, p. 9 – 10; Faruqui Reply Affidavit, p. 8, Fig. 2.1. This figure documents that 14 states imposed initial limitations that were raised as DG installations proliferated. These states represent all regions of the country and a full range of the political spectrum; yet each state saw merit to allowing additional DG development. With due respect to Dr. Faruqui, the decisions to move forward in these states cannot all be ascribed to political pressure of the 1% DG owners (Tr.203, li. 14 -204, li.8); these states must see overall positives in DG. These examples depict a market that can be increased beyond expectations through incentives and that can be discouraged beyond intentions with unfavorable policies. The Commission should proceed cautiously, and Cromwell asks rhetorically, wouldn't a good base of data on actual experience be advisable before proceeding?

C. Parallel Generation must remain separate from net metered customers for rate setting purposes.

Kansas statutes distinguish parallel generation customers (K.S.A. 66 – 1,184) from net metered customers (K.S.A. 66-1265). Net metered customers are compensated for energy delivered back into the distribution network with an offset against each kwh purchased by the customer. Parallel generation customers, on the other hand, are paid for similar deliveries at the avoided cost of energy which is about one-fourth of the price of a retail kwh. These price differentials are statutorily established. In addition, parallel generators are sized differently with the intent of providing all the customer's needs, but no more. Cromwell, Tr. 373, li. 4 – 20.

In direct opposition to the statutory framework of these two separate forms of distributed generation, the Stipulation and Agreement fails to distinguish between the two forms. The settling parties apparently intend to treat parallel generators as net metered customers. Martin, Tr. 108, li. 23 – 110, li. 9. It is imperative that the statutory distinctions be maintained through any rate structures ultimately developed for distributed generation customers. Therefore, if the Stipulation and Agreement is not rejected, conditions must be placed to preserve the distinction between parallel generators and net metered customers.

CROMWELL RECOMMENDATIONS

The exchange between CEP and Westar immediately prior to hearing revealed that the process of assembling data needed to evaluate the impacts—positive and negative—of distributed generation customers is just beginning. The data currently available is incomplete and covers a small sampling. Cromwell recommends that this process be continued and that within a reasonable time an independent third party be retained to evaluate the data and identify

for the Commission the costs and benefits of distributed generation that are quantifiable. The Commission could then develop a policy that would be used by utilities in future rate cases.

If the Commission elects to approve the Stipulation and Agreement it should condition the approval to:

1. Expand the list of acceptable rate designs to include all those identified in the NARUC Manual.

2. Reject the suggestion that DG customers are significantly different from other residential customers in usage characteristics.

3. Require separate treatment of net metered customers and parallel generation customers in accord with Kansas statutes.

4. Require that a specific cost/benefit analysis or "value of distributed generation" study be prepared in addition to the traditional cost of service study in the event a utility seeks separate rates for distributed generation customers.

CONCLUSION

The Stipulation and Agreement presented for approval does not satisfy the purposes and objectives of this generic investigation, and accordingly, the Stipulation and Agreement should be rejected. The Commission should direct an appropriate study by an independent third party to be completed in a reasonable time period to assess costs and benefits association with residential distributed generation. An acceptable data base is in the early stages of development and should be enhanced to form the basis of the independent study in order to produce a fact-based policy that can benefit both customers and utilities.

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Certificate of Service

The undersigned certifies that a true and correct copy of the foregoing pleading was served electronically upon all persons on the service list this 21st day of July, 2017.

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