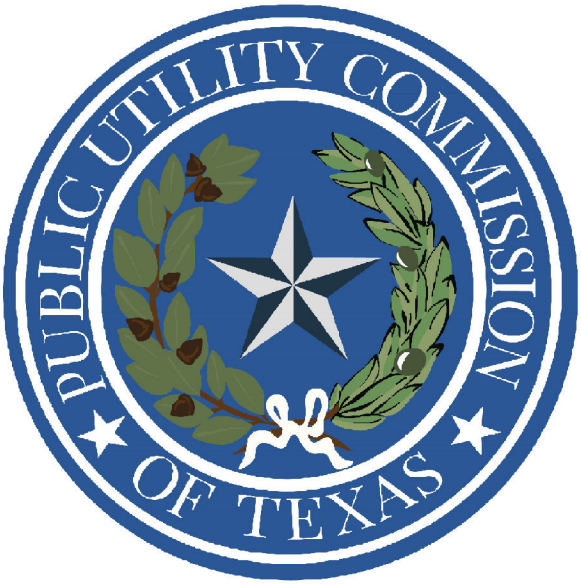

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APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR AUTHORITY TO CHANGE RATES	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

CROSS-REBUTTAL TESTIMONY
OF
LARRY BLANK

ON BEHALF OF
THE FEDERAL EXECUTIVE AGENCIES
AND
ORION ENGINEERED CARBONS, LLC

RATE DESIGN (RD)

September 14, 2021

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SECTION I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Larry Blank. My business address is TAHOEconomics, LLC, 6061 Montgomery Road, Midlothian, TX 76065. My email address is LB@tahoeconomics.com.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Federal Executive Agencies ("FEA"), represented by the U.S. Department of Energy, and Orion Engineered Carbons, LLC ("Orion").

Q. DID YOU PREPARE DIRECT TESTIMONY PREVIOUSLY FILED IN THIS CASE ON AUGUST 13, 2021?

A. Yes.

Q. WHICH WITNESSES ARE YOU RESPONDING TO IN THIS CROSS-REBUTTAL TESTIMONY?

A. I respond to portions of the testimonies of the following witnesses for other parties: Mr. Evan D. Evans on behalf of the Office of Public Utility Counsel ("OPUC"), and Mr. Jeffry Pollock on behalf to the Texas Industrial Energy Consumers ("TIEC").[1]

Q. PLEASE SUMMARIZE YOUR CROSS-REBUTTAL TESTIMONY OF THESE WITNESSES.

Mr. Evans' support of an energy allocation method for the Hale and Sagamore wind facility fixed costs is not based on cost causation principles. His advocacy for a monthly wind-weighted energy allocation method may give the appearance of being more specific

[1] All references to testimony herein is to testimony made in the Cost Allocation and Rate Design Phase of this case.

(although no more accurate) than SPS's annual energy allocation method, but actually does nothing to resolve the same lack of connection between the customer class use of energy in the allocation and wind output and wind-related fixed costs. It remains a fact that rate class energy usage does not cause the wind costs.

Mr. Pollock's advocacy for increases in demand charges is based on the faulty premise that classification of a cost as "demand-related" is more important than the actual cost allocation method utilized, in this case the AED-4CP method. While AED-4CP is considered a demand allocator by some people, it is actually an energy weighting method, which divides cost allocation between average demand (i.e., energy) and excess peak demand. Furthermore, the billing determinant used for the demand charges is based on maximum monthly demands of billed customers, which is an imperfect proxy for the 4CP excess demand used within the AED-4CP allocator.

Q. ARE YOU ENDORSING THE POSITION OF ANY PARTY ON ISSUES NOT ADDRESSED IN YOUR TESTIMONY?

A. No. The fact that I am not addressing an issue raised by a party in this proceeding should not be interpreted as an endorsement of that party's position.

SECTION II. OPUC's ALLOCATION OF WIND COSTS

Q. HAVE YOU REVIEWED OPUC'S RECOMMENDATIONS FOR THE ALLOCATION OF WIND ASSET COSTS?

A. Yes. OPUC's discussion of the allocation of the Hale and Sagamore wind production costs are found in Mr. Evans' direct testimony at pages 33-37.

Q. WHAT RECOMMENDATIONS DOES MR. EVANS MAKE?

A. Mr. Evans recommends the use of a monthly wind-weighted energy allocation method.[2]

Q. WHAT IS MR. EVANS' RATIONALE FOR THE USE OF AN ENERGY ALLOCATION METHOD FOR THE FIXED COSTS RELATED TO THE WIND ASSETS?

A. Mr. Evans argues that it is appropriate to allocate wind facilities costs based on an energy allocator because "SPS proposed and justified Hale and Sagamore as energy resources in the case in which they sought and received approval for a Certificate of Convenience and Necessity ("CCN") from the PUCT, Docket No. 46936."[3]

Q. IS MR. EVANS' RATIONALE BASED ON COST-CAUSATION PRINCIPLES?

A. No. First, a CCN case does not determine the prudency of the costs of an investment, it does not determine the revenue requirement associated with the investment, and it certainly does not determine the appropriate allocation method for the future costs of the proposed project. These determinations are made within the context of a general rate case, such as this case. As pointed out by Staff witness Mr. William B. Abbott in his direct testimony in this rate case: "Contrary to SPS's suggestion, their proposed allocation treatment was not approved by the Commission in Docket No. 46936."[4]

Second, the costs associated with Hale and Sagamore do not vary with customer energy usage and, therefore, are not "energy resources" in the sense of exclusively serving

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[2] Direct Testimony of Evan D. Evans at 32:1-2.
[3] *Id.* at 33:15-18.
[4] Direct Testimony of William B. Abbott at 37:1-6.

the average demand, or base energy needs of customers. That is not the case because the Hale and Sagamore costs are fixed and the wind turbines produce power when the wind blows, not in response to meeting the energy usage of customers. If the wind turbines produce power during system peak demand times, that electricity is substituting for peaking capacity, and if the wind turbines produce power during off-peak times, that electricity is substituting base load capacity, or load-following capacity. Therefore, the fixed cost nature of Hale and Sagamore, combined with the intermittent nature of the wind power output, is exactly why the AED-4CP method is best designed to accommodate the addition of wind turbine capacity costs. As I explained in my direct testimony,[5] and as Mr. Abbott notes in his direct testimony: "The use of the AED-4CP allocator to allocate all of SPS's production capacity costs recognizes the fact that SPS's production fleet meets both the need for peak capacity as well as the need to economize on energy costs."[6]

Q. DOES MR. EVANS'S TESTIMONY IN FAVOR OF A MONTHLY WIND-WEIGHTED VERSION OF THE ENERGY ALLOCATOR ALTER THE FACT THIS METHOD IS FLAWED?

A. No. The use of an energy allocation method based on monthly projected wind output and rate class energy usage during each month continues to suffer from the same disconnect in that the monthly energy usage by customers does not cause the wind output and in no way causes the costs of the wind turbines because those costs are fixed and do not vary with output at all. Furthermore, Mr. Evans has provided no evidence that the forecasted monthly

[5] Direct Testimony of Larry Blank at 18:22-19:7.
[6] Direct Testimony of William B. Abbott at 36:13-15.

energy generation of the wind facilities tracks actual energy generation. His statement that allocation "that reflects the expected monthly energy generation for these wind projects, that tracks the expected generation of Production Tax Credits for the projects, and that causes the allocation of the costs for these facilities to more accurately reflect the factors that caused the wind projects to be constructed"[7] does not resolve the fact that monthly energy usage by rate classes does not cause the output of the wind facilities nor the fixed costs associated with the wind facilities.

SECTION III. TIEC RECOMMENDATIONS FOR LGS-T RATE DESIGN

Q. WHAT DOES TIEC RECOMMEND WITH RESPECT TO THE ALLOCATION OF HALE AND SAGAMORE WIND FACILITIES FIXED COSTS?

A. Mr. Pollock, in his direct testimony submitted on behalf of TIEC, has recommended that the Commission "[r]eject SPS's allocation of the Hale and Sagamore costs entirely on an energy basis" and instead "[r]equire that all production and transmission plant costs be allocated using the AED-4CP method."[8] On these points, Mr. Pollock and I are in agreement.[9]

Q. WHAT DOES MR. POLLOCK RECOMMEND WITH RESPECT TO THE LGS-T RATE DESIGN?

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[7] Direct Testimony of Evan D. Evans at 34:15-18.
[8] Direct Testimony of Jeffry Pollock at 35:7-10.
[9] Direct Testimony of Larry Blank at 5:4-20.

A. Where Mr. Pollock and I disagree is with respect to his insistence that regardless of the allocation method approved by the Commission for the recovery of the Hale and Sagamore wind facility costs, the rate design for the LGS-T customer class should be weighted to including the revenue requirement in the demand charge paid by LGS-T customers disproportionately to the energy charge. As argued by Mr. Pollock in his direct testimony: "if SPS's proposed Hale and Sagamore plant allocation is approved, the LGS-T Demand and Energy charges should be increased by an equal percentage"[10] -- even though SPS's proposed Hale and Sagamore plant allocation is 100% energy. Yet, if the Commission approves the AED-4CP allocator for Hale and Sagamore, Mr. Pollock recommends that "the LGS-T Demand and Energy charges should be adjusted consistent with the results of TIEC's revised class cost-of-service studies."[11] Because Mr. Pollock views the AED-4CP method as a pure demand allocation method, the implication of his recommendation is that all fixed production costs would be recovered through the demand charges -- even though his AED-4CP method allocates 49.87% of the production cost using average demand (energy), and 50.13% using 4CP excess demand.[12]

Q. MR. POLLOCK ARGUES THAT RECOVERING THE FIXED COSTS OF HALE AND SAGAMORE AND OTHER PRODUCTION AND TRANSMISSION PLANT COSTS THROUGH THE LGS-T DEMAND CHARGE IS PREFERABLE TO RECOVERY OF THOSE COSTS

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[10] *Id.* at 34:11-12.
[11] *Id.* at 35:26-28; TIEC's revised class cost-of-service studies attached as Exhibit JP-RD-8 and JP-RD-9.
[12] Direct Testimony of Jeffry Pollock at Exhibit JP-RD-4, which shows a system load factor of 49.87% weighting for the energy allocation.

THROUGH THE LGS-T ENERGY CHARGE, BECAUSE RECOVERY OF THOSE COSTS IN THE LGS-T ENERGY CHARGE WILL CAUSE SPS TO "BECOME LESS REVENUE/EARNINGS STABLE."[13] DO YOU AGREE THAT THIS IS A VALID BASIS TO RECOVER THE COSTS OF HALE AND SAGAMORE IN THE LGS-T DEMAND CHARGE?

A. No, I don't. Mr. Pollock's argument attempts to prioritize short term revenue stability over cost causation as an objective of rate design. SPS's revenue and earnings stability would be assured by recovery of all costs in the customer charge if that were the goal of rate design. And no costs would be included in the energy charge nor the demand charge if SPS's revenue and earnings stability were the goal of rate design. It is an odd argument for a customer group like TIEC to make that the priority in rate design is the utility's revenue and earnings stability. More importantly, his argument that revenue and earnings stability should drive rate design is directly contradicted by his testimony that "[r]ate design is a continuation of the cost allocation process. A cost-based rate design means setting the various tariff charges to reflect the allocated costs."[14] As noted below, I agree with this principle. Recovery of the costs of Hale and Sagamore in LGS-T rates on either a 100% demand basis or a 100% energy basis cannot be supported on the basis of cost causation. Furthermore, Mr. Pollock makes no showing that SPS's revenue and earnings stability within the LGS-T class is at risk, much less that a rate design consistent with customer class allocations derived from the AED-4CP method could reasonably be expected to

[13] *Id.* at 34:1-4.
[14] *Id.* at 31:4-5.

produce rates that would result in under recovery of costs by SPS, and so has not provided support for abandoning the basic ratemaking principles he supports elsewhere.

Q. HOW DOES THIS COMPARE TO YOUR RECOMMENDATION FOR THE LGS-T RATE DESIGN?

A. I have recommended that the current level of the demand charges remain the same and any increase due to production or transmission cost increases be applied to the energy charge. As explained in my direct testimony,[15] this recommendation for rate design is consistent with the manner in which AED-4CP allocates costs to the rate class because the current demand charge already recovers more than the one minus system load factor share of the fixed production and transmission costs.

Q. WHAT IS THE BASIS FOR TIEC'S RECOMMENDATIONS FOR LGS-T RATE DESIGN?

A. These are found within the direct testimony of Mr. Pollock at page 31-34. He begins with a principle that "Rate design is a continuation of the cost allocation process. A cost-based rate design means setting the various tariff charges to reflect the allocated costs."[16] I agree with this statement by Mr. Pollock and have followed the same logic in deriving my rate design recommendation in which the LGS-T demand charges should remain at current levels and any increase in rates due to increased production costs should be done through higher energy charges because over 66% of these costs are allocated based on average demand, i.e., energy usage. But Mr. Pollock goes on to state that "the Demand charges

[15] Direct Testimony of Larry Blank at 28:12-19.
[16] Direct Testimony of Jeffry Pollock at 31:4-5.

should reflect allocated demand-related costs; and the Energy charges should reflect allocated energy-related costs."[17] Applied narrowly by Mr. Pollock, this premise ignores the allocation method utilized. Although the costs allocated by the AED-4CP method have been classified as "demand-related", the allocation method is a hybrid method with over 66% allocated based on average demand or rate class energy usage. Mr. Pollock's emphasis in favor of higher demand charges contradicts the original fundamental intent and construction of the AED-4CP method he supports,[18] and contradicts his logic quoted above that rate design should follow allocated costs.

Q. WHAT IS THE FUNDAMENTAL INTENT AND CONSTRUCTION OF THE AED-4CP METHOD?

A. The AED-4CP method supported by Mr. Pollock and me is one of the "Energy Weighting Methods" described within the NARUC *Electric Utility Cost Allocation Manual* (Jan. 1992). This category of methods are generally described on page 49 of the manual as follows:

> There is evidence that energy loads are a major determinant of production plant costs. Thus, cost of service analysis may incorporate energy weighting into the treatment of production plant costs . . . . In some cases, an energy allocator (annual KWH consumption or average demand) is used to allocate part of the production plant costs among the classes....

With respect to the "Objective" of the average and excess method, the manual states:

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[17] *Id.* at 31:7-8.
[18] *Id.* at 4:6-7.

> The cost of service analyst may believe that average demand rather than coincident peak demand is a better allocator of production plant costs. The average and excess method is an appropriate method for the analyst to use."[19]

Therefore, we see that the intent and design of the AED-4CP method is to recognize a mix of energy usage and system peak demand as cost causation for production capacity. In the case of SPS, this mix is 66.49% allocated based on energy and the remainder based on 4CP excess demand.

Support for my rate design recommendation is also found within the NARUC manual description of the average and excess method as follows:

> Some analysts argue that the percentage of total production plant that is equal to the system load factor percentage should be classified as energy-related and not demand-related. This could be important because, although classifying the system load factor percentage as energy-related might not affect the allocation among the classes, it could significantly affect the apportionment of costs within rate classes.[20]

Herein lies the recognition that if you are going to allocate the load factor portion based on energy (average demand), then the energy charge would be the fairest way to recover that portion of the costs as I have argued here.

Q. HOW WOULD YOU PROPERLY IMPLEMENT MR. POLLOCK'S LOGIC THAT "A COST-BASED RATE DESIGN MEANS SETTING THE VARIOUS TARIFF CHARGES TO REFLECT THE ALLOCATED COSTS"?

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[19] NARUC Electric Cost of Service Manual at 49 (Jan. 1992).
[20] *Id.* at 51.

A. As implied in Mr. Pollock's logic, the allocation method chosen should drive the costs to be assigned for recovery within a particular rate class. If that allocation method is based on energy, then the higher energy users within the class caused the costs to be assigned and costs should proportionately be recovered from those customers. Similarly, if the allocation method is AED-4CP, then the load factor portion of costs was allocated based on energy usage (i.e., average demand) and the remainder was based on excess demand at the 4CP peaks. Rate design should follow the same logic to ensure fairness in cost recovery through the rates with the load factor portion of costs recovered through energy charges.

Q. WHERE DO YOU DEPART FROM MR. POLLOCK IN THIS CASE?

A. As quoted from Mr. Pollock, I believe that rate design should follow the way in which the costs are allocated to the rate class to achieve the fairest recovery method in which those customers causing more cost allocation will become more responsible for the cost recovery. However, it appears that Mr. Pollock also believes that classification as "demand-related", not the AED-4CP allocation method, should be the primary determinant for rate design. I believe this is flawed when costs are classified as demand-related, but a large portion of those costs is actually allocated based on energy. When that is the case, the classification of "demand-related" costs is less reliable for rate design and we must look at the way in which the costs are actually allocated.

Q. HAS ANY OTHER WITNESS IN THIS CASE TESTIFIED TO THE REAL LIFE HARM OF A RATE DESIGN THAT INCREASES THE DEMAND CHARGE FOR THE LGS-T RATE CLASS AS MR. POLLOCK

RECOMMENDS IN A MANNER CONTRARY TO COST CAUSATION PRINCIPLES?

A. Yes, Mr. Greg Zartman on behalf of Orion has provided testimony that explains the materially adverse economic impact on the operations of Orion that would result from an increase in the demand charge in the LGS-T rates as proposed by SPS, and which would also occur under TIEC's proposal to increase the demand charge in a manner inconsistent with cost causation. Mr. Zartman has explained that Orion has constructed an on-site cogeneration plant at its Borger, Texas manufacturing plant to help manage its electricity requirements.[21] However, an increase in the demand charge as proposed in this case would increase the Borger plant's costs precipitously and threaten the plant's viability.[22] Orion does not enjoy the purported benefits of low cost energy from the Hale and Sagamore wind facilities because the Borger plant purchases relatively little electricity from SPS as a result of the cogeneration plant, yet Orion experiences a disproportionate rate increase from the demand-weighted rate design proposed by SPS, and also recommended by TIEC. I provided additional examples in my direct testimony of the disproportionate impact on customers at various load factors of an LGS-T rate design that recovers SPS's proposed rate increase disproportionately through the demand charge.[23]

Q. PLEASE RESTATE YOUR RECOMMENDATION FOR LGS-T RATE DESIGN ASSUMING THE AED-4CP METHOD RECOMMENDED BY

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[21] Direct Testimony of Greg Zartman at 3:31-4:1 and 4:12-17.
[22] *Id.* at 5:3-8.
[23] Direct Testimony of Larry Blank at page 31, Table 4.

YOU AND MR. POLLOCK IS USED FOR ALL PRODUCTION FIXED COSTS.

A. I recommend that the load factor portion of these costs be recovered through the energy charge, and the remainder recovered through the demand charge as long as my recommendation causes no reduction in the current demand charges. This method is consistent with the way in which AED-4CP allocates costs to the rate class. In this case, and more specifically for the LGS-T rate class, my recommendation, when applied to all of the production costs, would cause a reduction in the demand charge because over 66% of the class revenue requirement is already allocated under current rates based on energy use. Therefore, any increase in base rates for the LGS-T rate class should be applied as an increase in the energy charge, holding the demand charges at current levels.

Q. WHY IS YOUR RECOMMENDATION FOR LGS-T RATE DESIGN MORE JUST AND REASONABLE THAN MR. POLLOCK'S?

A. Those customers with higher energy usage cause the average demand for the class to be higher and the load factor weight is applied to class average demand in the determination of the AED-4CP allocation ratio. Those customers with higher monthly peak demands cause more excess demand for the class and one minus the load factor is the weight applied to excess demand in the determination of the AED-4CP allocation ratio. Therefore, the cost causation principle suggests that the portion allocated based on energy usage (average demand) should be recovered through energy charges, and the remainder through maximum demand charges.

Q. MR. POLLOCK IS PROMOTING GREATER USE OF DEMAND CHARGES FOR COST RECOVERY, BUT IS THE BILLING DETERMINANT FOR THE DEMAND CHARGES CONSISTENT WITH THE AED-4CP?

A. No. At page 33, lines 3-11, of his direct testimony, Mr. Pollock discusses the magnitude of the winter and summer demand charges but does not offer any change in the billing determinants used by SPS. In this context, he states "[t]his is the reason why the AED-4CP method, which places emphasis on the demands that occur coincident with SPS's summer month system peaks, remains appropriate for allocating demand-related costs."[24] However, he does not acknowledge the fact the summer demand charge is not billed based "on the demands that occur coincident with SPS's summer month system peaks" and therein lies the disconnect between the demand charge rates and the AED-4CP allocation. The SPS billing determinant for the demand charges as applied both in the summer and in the winter months is the "Customer's greatest kW use during the month, but not less than 70 percent of the highest demand established in the preceding eleven months."[25] The excess demand portion of the AED-4CP is based on four months of rate class coincident peak at system peak. The actual billing determinant used by SPS departs greatly from the way in which that portion of costs is allocated to the rate class making it less reliable for just and reasonable cost recovery. The energy charge, on the other hand, is perfectly consistent with the average demand allocation portion of the AED-4CP method.

[24] Direct Testimony of Jeffry Pollock at 33:6-8.
[25] SPS Texas Electric Tariff Section No. IV, Sheet No. IV-108, Revision No. 13, Page 2 of 4, PUCT Approved Jan. 10, 2020.

Mr. Pollock would like to increase reliance on the demand charges and less on the energy charge for cost recovery from LGS-T customers despite the fact that the demand charges in use do not bill customers in a manner consistent with the 4CP excess demand used in the AED-4CP method used to allocate those costs to the rate class.

Q. HAVE YOU PREPARED A TABLE THAT COMPARES YOUR RECOMMENDATIONS ON COST ALLOCATION AND RATE DESIGN WITH THAT OF MR. POLLOCK?

A. Yes, please see Table 1-CR below. This table shows Mr. Pollock's recommended allocation of all fixed production costs using his modified AED-4CP for all fixed production costs including wind and my recommended allocation of those fixed production costs using SPS's AED-4CP. It also shows that my recommendations for rate design are consistent with the cost allocation approach but the rate design recommendations of TIEC are not consistent with Mr. Pollock's recommended allocation.

Table 1-CR.
Comparison of Fixed Production Cost Allocation and Recommended Rate Design

	Recommended Allocation		Recommended Rate Design (LGS-T)	
Party	% Energy	% 4CP Excess	% Energy Charge	% Demand Charge
TIEC[1]	49	51	0	100
FEA-Orion[2]	66	34	66	34

Notes:

(1) Mr. Pollock views all fixed production costs as demand-related despite the AED-4CP allocation. Pollock Direct at 31:7-8. Pollock Exhibit JP-RD-4 shows a load factor weighting for energy at 49.87% and a 50.13% weighting for excess demand.

(2) FEA-Orion recognizes that this rate design applied to production and transmission costs as a whole would require reduction in the demand charges as a result of the outcome of prior rate case settlements. Dr. Blank mitigates his rate design recommendation by simply making no change in the demand charge.

This table assumes the Commission adopts either Mr. Pollock's modified AED-4CP or SPS's AED-4CP for the allocation of all fixed production costs, including those for Hale and Sagamore wind facilities. If the Commission were to adopt SPS's energy allocation for wind costs, then my recommendation on the LGS-T rate design consistently changes to apply all of the revenue requirement associated with Hale and Sagamore wind for recovery within the LGS-T energy charge. If the Commission adopts Mr. Pollock's modified AED-4CP (that is, removing the energy supplied by wind purchased power agreements from the load factor weighting applied to production AED-4CP allocation factors[26]), then my recommendation on the LGS-T rate design consistently changes to apply 49.87% of all

[26] *See, e.g.,* Direct Testimony of Jeffry Pollock at 23:1-3 and 27:12-14.

fixed production costs for recovery within the energy charge, and the remainder within the demand charge.

Q. DOES THIS CONCLUDE YOUR CROSS-REBUTTAL TESTIMONY?

A. Yes.

AFFIDAVIT

State of Texas)
)
County of Ellis)

Larry Blank, first being sworn on his oath, states:

I am the witness identified in the preceding Cross-Rebuttal Testimony. I have read the testimony and am familiar with the contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

Signature: Larry Blank
Name: Larry Blank
Date: 13 SEP 2021

Subscribed and sworn to before me this 13th day of September, 2021

Cathy Gaeta

Notary Public, State of Texas

My Commission expires: 4/15/24

CATHY GAETA
My Notary ID # 4868502
Expires April 15, 2024

CERTIFICATE OF SERVICE

I, Peter Meier, Attorney for the United States Department of Energy, hereby certify that a copy of the Cross-Rebuttal Testimony of Larry Blank On Behalf of the Federal Executive Agencies and Orion Engineered Carbons, LLC was served on parties of record in SOAH Docket 473-21-1892, PUC Docket No. 51802 on September 14, 2021 by facsimile, First Class Mail, or electronic mail.

/s/ Peter Meier
Peter Meier