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#### JIM ROURKE'S CLOSING BRIEF

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# TO THE HONORABLE ALFRED R. HERRERA, IMPARTIAL HEARINGS EXAMINER. In this Closing Brief, I address one issue, my request for revision of the residential Value of Solar tariff rider to include additional information regarding the components and methodology for calculating the Value of Solar Rate. This issue is section VI. C. of the briefing outline.

#### VI. Value Of Solar Issues

#### C. VOS Residential Tariff

In my Initial Party Presentation (and my Motion To Intervene), I requested that Austin Energy (AE) revise its residential Value-Of-Solar (VOS) tariff rider to include more information on how the VOS Rate is calculated and to clearly identify and define the components of the rate. On May 20, 2016, AE filed the rebuttal testimony of Ms. Deborah Kimberly, which addressed this issue. In her testimony, Ms. Kimberly testified about AE's recommendation for a more detailed VOS tariff description of the calculation of the VOS rate: "If a more detailed description were to be included in the tariff language, AE suggests more clearly identifying and defining the components of the formula, providing a table, and setting forth the calculated value for that year." See attached Appendix A to this brief for additional detail regarding the recommendation. AE and I agreed upon AE's implementation of this recommendation as the resolution of my request, and announced our agreement (specifically referring to Ms. Kimberly's filed rebuttal testimony) on the record during the June 2, 2016 session of the hearing. Tr. 680-682. Additionally, Jim Rourke Exhibit No. 3 was admitted into evidence on this issue. Tr. 736.

Kimberly's filed rebuttal testimony, which defines the components and describes the methodology for calculating the VOS Rate. A copy of this exhibit is attached as Appendix B to this brief. No party objected to this revision of the VOS tariff rider. Therefore, I request that the Impartial Hearings Examiner include the agreed VOS tariff language and table in the proposal for decision recommendations to the City Council.

Copies of this Closing Brief are being served on parties listed on the City Clerk's service list as of the date of this filing.

/s/ James K. Rourke, Jr.

James K. Rourke, Jr. *Pro Se* Telephone: (512) 736-6651 Email: jim78731@gmail.com

Date Submitted: June 10, 2016

### APPENDIX A

1		The general methodology, calculated VOS, and VOS rate (which is a rolling				
2		average) are provided in the tariff, along with information on how the tariff will be				
3		applied and relevant restrictions. Further detail is also available on the Austin Energy				
4		website for those customers seeking to better understand the tariff.				
5		The detailed methodology and calculations are not appropriate tariff language,				
6		and could be confusing to customers.				
7	Q.	IF AUSTIN ENERGY WERE TO PROVIDE A MORE DETAILED TARIFF				
8		DESCRIPTION, WHAT WOULD AUSTIN ENERGY RECOMMEND?				
9	A.	If a more detailed description were to be included in the tariff language, AE suggests				
10		more clearly identifying and defining the components of the formula, providing a				
11		table, and setting forth the calculated value for that year. An example is shown				
12		below:				
13		VOS Methodology				
× .		The Value of Solar is calculated annually based on the following components:				
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14 15 16 17		<ul> <li>The Value of Solar is calculated annually based on the following components:</li> <li>Energy Value – an avoided cost of energy to meet electric loads as well as transmission and distribution losses, based on the solar production profile. This is inferred from ERCOT wholesale market price data and future natural gas prices.</li> </ul>				
14 15 16 17 18 19 20		<ul> <li>The Value of Solar is calculated annually based on the following components:</li> <li>Energy Value – an avoided cost of energy to meet electric loads as well as transmission and distribution losses, based on the solar production profile. This is inferred from ERCOT wholesale market price data and future natural gas prices.</li> <li>Plant O&amp;M Value – an avoided cost associated with natural gas plant operations and maintenance by meeting peak load through customer-sited renewable resources.</li> </ul>				
14 15 16 17 18 19 20 21 22 23		<ul> <li>The Value of Solar is calculated annually based on the following components:</li> <li>Energy Value – an avoided cost of energy to meet electric loads as well as transmission and distribution losses, based on the solar production profile. This is inferred from ERCOT wholesale market price data and future natural gas prices.</li> <li>Plant O&amp;M Value – an avoided cost associated with natural gas plant operations and maintenance by meeting peak load through customer-sited renewable resources.</li> <li>Generation Capacity Value – an avoided cost of capital by meeting peak load through customer-sited renewable resources, inferred from ERCOT market price data.</li> </ul>				
14 15 16 17 18 19 20 21 22 23 24 25		<ul> <li>The Value of Solar is calculated annually based on the following components:</li> <li>Energy Value – an avoided cost of energy to meet electric loads as well as transmission and distribution losses, based on the solar production profile. This is inferred from ERCOT wholesale market price data and future natural gas prices.</li> <li>Plant O&amp;M Value – an avoided cost associated with natural gas plant operations and maintenance by meeting peak load through customer-sited renewable resources.</li> <li>Generation Capacity Value – an avoided cost of capital by meeting peak load through customer-sited renewable resources, inferred from ERCOT market price data.</li> <li>Transmission and Distribution Capacity Value – savings in transmission costs resulting from the reduction in the peak load by locally-sited renewable resources.</li> </ul>				

1		These are calculated as follows:			
2 3		<b>Energy Value</b> = $\sum$ (Implied Heat rate * Gas Price* PV Production*Risk Free discount factor) $\sum$ (PV Production*Risk Free discount factor)			
4		Guaranteed Fuel Value = Energy Value * (1+Loss factor)			
5 6 7 8		Plant O & M value = $\frac{(\sum (O \& M Cost * (1+Inflation)^{year} * PV Capacity * Risk Free discount factor)) * (1+Loss factor)}{\sum (PV Production * Risk Free discount factor)}$			
9 10 11		Generation Capacity value = ( $\sum$ (Annual Capital carrying cost*PV capacity*Risk Free discount factor)) *load match* (1+ Loss factor) $\sum$ (PV Production*Risk Free discount factor)			
12 13 14 15		Avoided Transmission cost = $(\sum (Transmission cost* PV capacity*Risk Free discount factor))*load match* (1+ Loss factor))$ $\sum (PV Production*Risk Free discount factor)$ where Transmission cost is Austin Energy contribution to ERCOT TCost			
16 17		<b>Environmental Compliance Value</b> = \$0.02 / kWh based on average premium paid in voluntary green power purchasing programs in Texas.			
18		IV. ENERGY EFFICIENCY SERVICES CHARGE			
19	Q.	WHAT RECOMMENDATION DOES PCSC OFFER WITH RESPECT TO			
19 20	Q.	WHAT RECOMMENDATION DOES PCSC OFFER WITH RESPECT TO THE ENERGY EFFICIENCY SERVICES ("EES") CHARGE?			
19 20 21	<b>Q.</b> A.	WHAT RECOMMENDATION DOES PCSC OFFER WITH RESPECT TO THE ENERGY EFFICIENCY SERVICES ("EES") CHARGE? PCSC recommends a uniform \$0.00280 per kilowatt hour charge for all customer			
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<ol> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> <li>29</li> </ol>	<b>Q.</b>	WHAT RECOMMENDATION DOES PCSC OFFER WITH RESPECT TO THE ENERGY EFFICIENCY SERVICES ("EES") CHARGE? PCSC recommends a uniform \$0.00280 per kilowatt hour charge for all customer classes, with a slight adjustment for voltage—a 2.5% discount for primary customer classes and a 3.5% discount for transmission level customers. PCSC's proposal would result in Austin Energy collecting an additional \$9 million through the EES charge. It should be noted that PCSC's discussion of AE's EES fee is outside the scope of this proceeding. AE's EES Fee is included in its Community Benefit Charge ("CBC"). According to the IHE's Memorandum No. 11, whether costs included in the CBC should be increased or decreased is <i>not</i> included within the scope of this			

## VOS Methodology

COMPONENT	DEFINITION	FORMULA
Energy Value	Estimated avoided cost of energy to meet electric loads as well as transmission and distribution losses, based on the solar production profile. This is inferred from ERCOT wholesale market price data and future natural gas prices.	$ \sum (\text{Implied Heat rate * Gas Price* PV Production*Risk Free discount factor})                                    $
Plant O&M Value	Estimated avoided cost associated with natural gas plant operations and maintenance by meeting peak load through customer-sited renewable resources.	<u>(∑ (O &amp; M Cost *(1+Inflation)</u> <sup>∧year</sup> * PV Capacity*Risk Free discount factor)) * (1+ Loss factor) ∑ (PV Production*Risk Free discount factor)
Generation Capacity Value	Estimated avoided cost of capital by meeting peak load through customer- sited renewable resources, inferred from ERCOT market price data.	( $\sum$ (Annual Capital carrying cost*PV capacity*Risk Free discount factor)) *load match* (1+ Loss factor) $\sum$ (PV Production*Risk Free discount factor)
Transmission and Distribution Value	Estimated savings in transmission costs resulting from the reduction in the peak load by locally-sited renewable resources, and savings or costs related capital investments to distribution grid.	(∑.(Transmission cost* PV capacity*Risk Free discount factor)) *load match* (1+ Loss factor) ∑ (PV Production*Risk Free discount factor) where <b>Transmission cost</b> is Austin Energy contribution to ERCOT TCost Distribution value is currently not calculated, but will need further review as solar penetration increases.
Environmental Compliance Value	Estimated avoided cost to comply with environmental regulations and local policy objectives.	Set at \$0.02 / kWh based on average premium paid in voluntary green power purchasing programs in Texas when VOS was implemented.